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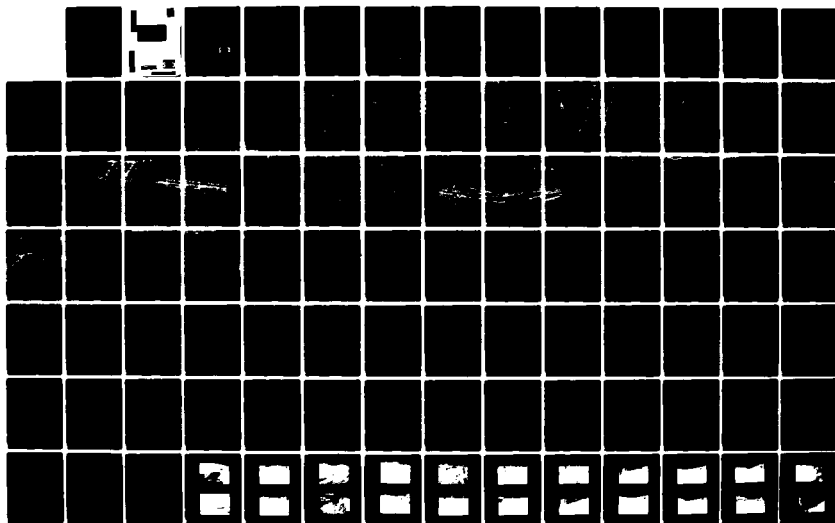
FLOOD PROTECTION SECTION 4 OHIO RIVER SOUTHWEST
JEFFERSON COUNTY KENTUCKY..(U) ARMY ENGINEER DISTRICT
LOUISVILLE KY G FITZGERALD APR 84 ORLCD-1-84

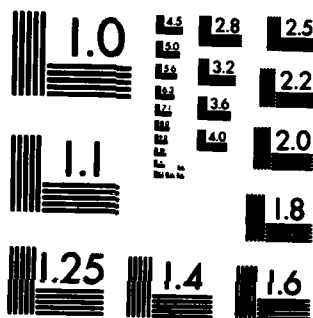
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FOUNDATION REPORT

Supplement Number 6

Local Flood Protection Project

Southwestern Jefferson County, Kentucky

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER ORLCD-1-84	2. GOVT ACCESSION NO. AD-A140 358	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Foundation Report, Supplement No. 6, Flood Protection, Section 4, Ohio River, Southwest Jefferson County, Kentucky USE TITLE ON 1473		5. TYPE OF REPORT & PERIOD COVERED Final
7. AUTHOR(s) Resident Engineer Gary Fitzgerald		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS U.S. Army Corps of Engineers Louisville Resident Office, 10450 Lower River Rd Louisville, Kentucky 40272		8. CONTRACT OR GRANT NUMBER(s) DACW27-83-C-0003
11. CONTROLLING OFFICE NAME AND ADDRESS As Above		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) U.S. Army Corps of Engineers Louisville District Office Construction Division, P.O. Box 59 Louisville, Kentucky 40201		12. REPORT DATE April 1984
		13. NUMBER OF PAGES 98
		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Ohio River Jefferson County, Kentucky Flood Protection Levee		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) → This report is a continuation of a series of reports covering the foundation work for levee construction around the southwest portion of Jefferson County, Kentucky. The report contains a narrative, drawings and photographs of the conditions encountered and the methods employed to perform the contract requirements.		

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FOUNDATION REPORT

SUPPLEMENT NO. 6

SOUTHWESTERN JEFFERSON COUNTY, KENTUCKY

LOCAL FLOOD PROTECTION PROJECT

CONTRACT NO. DACW27-83-C-0003

CONSTRUCTION SECTION 4 LEVEE AND WALL

STATION 735+00 to STATION 868+00

APRIL 1984

TABLE OF CONTENTS

TEXT

<u>Subparagraph</u>		<u>Page</u>
	<u>Section 1 - INTRODUCTION</u>	
01	Location of Section 4	1-1
02	Contractors	1-1
03	Contract Supervision	1-3
	<u>Section 2 - FOUNDATION EXPLORATIONS</u>	
01	Subsurface Investigations Prior to Construction	2-1
02	Foundation Investigations During Construction	2-1
	<u>Section 3 - GEOLOGY</u>	
01	Engineering Characteristics of Overburden Materials	3-1
02	T-Wall Stability Analysis	3-2
	<u>Section 4 - EXCAVATION PROCEDURES FOR FOUNDATIONS</u>	
01	Excavation Grades	4-1
02	Method of Excavation	4-1
03	Foundation Preparation	4-2
04	Deviations From Planned Conditions	4-2
	<u>Section 5 - GATEWELLS</u>	
01	Locations of Gatewells	5-1
02	Deviations From Planned Conditions	5-1
	<u>Section 6 - POSSIBLE FUTURE PROBLEMS</u>	
01	Conditions That Could Produce Problems	6-1
02	Recommended Observations	6-1

TABLE OF CONTENTS - Continued

TEXT

<u>Plate</u>	<u>Description</u>
1	Vicinity Map Southwestern Jefferson County Local Flood Protection
2	Location Section 4 with Bore Hole Locations
3	Location Section 4 with Bore Hole Locations
4	Location Section 4 with Bore Hole Locations
5	Location Section 4 with Bore Hole Locations
6	Boring Logs
7	Boring Logs
8	Boring Logs
9	T-Wall Sections
10	T-Wall Monoliths and Closure Structures
11	T-Wall Monoliths and Closure Structures
12	Location Gatewell Station 767+12 ⁺

Photos

Volume I - Main Line Station 775+50⁺ to Station 867+00

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INTRODUCTION

1-01 Location of Section 4. Section 4, the fifth reach to be constructed, extends from Section 2 at Station 735+00 southward to a point of tie-in with the embankment of Dixie Highway (Station 868+00) just north of the intersection of Dixie Highway and Kentucky State Highway 44. Actual construction on the north end of this reach began at Station 774+65 at a point of tie-in with the railroad embankment on Louisville Gas and Electric Company Mill Creek Generating Station property. Between Stations 735+00 and 774+65, the Louisville Gas and Electric Company Mill Creek Generating Station and the railroad embankment provide the required protection. Plate No. 1 shows this section in relation to other construction sections and its position in the total project. Plate Numbers 2, 3, 4 and 5 show the location of Section 4 in detail. Section 4 includes approximately 8,800 feet of earth levee, 1,550 feet of concrete wall, two diversion sewers, two gatewells, four closure structures (Dixie Highway, Houk Lane, Flintkote Access Road, Illinois Central Gulf Railroad).

1-02 Contractors. The prime contractor for construction of Section 4 was Renshaw Construction Company, Inc. of Madisonville, Kentucky. Mr. Elvis H. Butler, Jr., Vice President was the home office principal directly responsible for the project. Mr. Kenny Wigginton was Project Superintendent responsible for onsite operations through August 1983; Mr. Mike Kolstad was Project Superintendent for onsite operations from September 1983 through the time that this supplement was written.

Renshaw Construction Company, Inc. constructed all earth levee and earth embankments for access roads on Section 4.

Firms that subcontracted work on this section of the project and the types of work subcontracted are as follows:

- a. Concrete Wall, Closure Structures, Gatewells
and Storage Vaults - T. H. Ballard Construction, Inc.
1474 South Floyd Street
Louisville, Kentucky 40208
- b. Toedrain, Riprap, Culvert Pipes, Diversion
Sewers and Paved Ditch - T and C Contracting Co.
14201 Bohannon Lane
Louisville, Kentucky 40272
- c. Bored Encasement Pipe and Jacked
Pipe - Van Meter Construction Co.
790 Westland Drive
Lexington, Kentucky 40504

- d. Reinforcing Steel - Centen Steel Erectors, Inc.
Route 2, Box 230B
Manchester, Tennessee 37355
- e. Steel Sheet Piling - RAM Engineering & Construction, Inc.
P.O. Box 35160
Louisville, Kentucky 40232
- f. Chain Link Fence - Cardinal Fence Company
4615 Illinois Avenue
Louisville, Kentucky 40213
- g. Roof Deck and Insulation on Storage
Vaults - Triangle Industries
4626 Illinois Avenue
Louisville, Kentucky 40213
- h. Masonry on Storage Vaults - Cardinal Construction Company
2409 West Market Street
Louisville, Kentucky
- i. Service Doors on Storage
Vaults - Overhead Door Company of Louisville
3909 Oaklawn
Louisville, Kentucky 40219
- j. Seeding - Southern Contractors, Inc.
208 Dishman Lane
Bowling Green, Kentucky 42101
- k. Stone and Asphalt - Murray Company, Inc.
P.O. Box 23410
Anchorage, Kentucky 40223
- l. Electric Service to
Gatewell - United Electric Company
4720 Pinewood Road
Louisville, Kentucky 40218
- m. Excavation and Backfill for Concrete Wall
and Structures - Breslin Company, Inc.
P.O. Box 35582
Louisville, Kentucky

WM. G. Scott Excavating
4000 Camp Ground Road
Louisville, Kentucky

V. J. Dermody
4613 Bittersweet Road
Louisville, Kentucky 40218

1-03 Contract Supervision. Government personnel responsible
for onsite administration of the Section 4 work was:

Mr. Gary V. Fitzgerald - Resident Engineer

FOUNDATION EXPLORATIONS

2-01 Subsurface Investigations Prior to Construction.

Investigations were made for the levee and floodwall using drive sampling, Denison, NX core, power auger and hand auger methods. The borrow areas were investigated mainly by the use of hand augers. Boring locations are presented in Design Memorandum No. 1 on Plates 1B-29, 33-35, 37-42 and 54-61. Graphic logs are presented on Plates 63 through 78. Initial drilling to determine the scope of work was begun in 1965 and was accomplished by contract drilling. This was supplemented by District Drilling in 1966, 1970 and 1971. A portion of these logs are presented on Plate Numbers 6, 7 and 8 of this supplement. Locations of the borings are shown on Plates 2, 3, 4 and 5 of this supplement.

2-02 Foundation Investigation During Construction.

Investigations during construction consisted of visual inspection of the foundation and inspection trench prior to embankment placement. A required inspection trench was excavated between Station 774+65 and Station 825+00, Station 845+66 and Station 856+50, Station 860+40 and Station 867+75. Foundation conditions were also visually inspected after excavation and prior to construction of the concrete T-Wall and closure structures.

GEOLOGY

3-01 Engineering Characteristics of Overburden Materials.

No specific foundation soil engineering studies were conducted within this reach of levee. The borings taken prior to construction show the soil classifications encountered. The silts, clays and sands were similar to those from the adjacent levee Sections 2 and 5 where extensive studies were carried out. (See Foundation Report Supplement Numbers 2 and 4 or Supplement No. 2 to Design Memorandum No. 1).

A representative number of borings taken in Section 4 are shown on Plates 6 through 8 of this report.

T-Wall.

a. General. The T-wall stability analysis and test data are presented in Design Memorandum No. 1 and summarized in Supplement No. 2 to Design Memorandum No. 1. Strength values obtained from tests on soil from boring U-501A and U-502 were used in analyzing the wall. Both structural and sliding stability analyses were done using a GE 225 computer. Program number 41-G1-H201 was used.

b. Structural Stability Analysis. Plate 79 of Design Memorandum No. 1 shows the dimensions and forces used in the manual check of the computer. The calculations are shown on Plates 80 through 83 of Design Memorandum No. 1. The resultant from loading number 1 is 0.033 foot in from the quarter point and the resultant from loading number 2 is 0.675 foot in from the one-third point, thus satisfying the conditions for the point of action of resultants set forth in EM 1110-2-2501.

The toe pressure, creep ratio and estimated horizontal movement were also calculated and the calculations are shown on Plates 84 and 85 of Design Memorandum No. 1. All of the above items were within the allowable limits established in EM 1110-2-2501.

c. Sliding Stability Analysis. For simplicity of design, a flat failure plane was assumed. The method of analysis is shown in Figure 5-10 of EM 1110-2-2501. In computing the uplift along the failure plane, a straight line assumption was used in lieu of a flow net with full flood head assumed acting at the bottom of the key with the intersection at the failure plane and ground surface being the point of zero potential. This assumption has been proven to be on the conservative side.

The manual calculations made to check the computer results for sliding stability are shown on Plates 86 and 87 of Design Memorandum No. 1. The lowest factor of safety obtained for the "Q" case was 5.17 and the lowest factor of safety for the "R" case was 3.01.

Plates 88 and 89 of Design Memorandum No. 1 show the required shearing strength curves obtained by using a factor of safety of 1.0 and 1.5+2c. These curves were based on the test values obtained from holes U-501A and U-502 since no values were available on borrow areas at the time of the analysis. Tests on the borrow areas yielded higher strengths than the values used. Therefore, it was not considered necessary to rerun the analysis since the new values would raise the factor of safety.

EXCAVATION PROCEDURES FOR FOUNDATIONS

4-01 Excavation Grades. The contract plans and specifications call for the levee to be built essentially on existing ground after stripping whatever organic material existed except for the special foundation excavation specified between Stations 825+00 and 833+00. Very little additional excavation for unsuitable material was necessary. The areas that were undercut occurred at locations where the drainage in the existing area was poor or where top soil and roots remained in the foundation after required excavation grades were reached. These areas were located under both the earth embankment portion of the levee and the concrete T-wall section.

A typical cross section of the levee is included on Plate Number 4 showing limits of excavation. Typical sections of T-wall are shown on Plate Number 9.

Plate Numbers 10 and 11 show the profile of the wall and closure structures. The numbering of the wall and closure monoliths on these plates will reference locations of foundation photographs included in this supplement and undercuts of unsuitable material discussed in paragraph 4-02.

4-02 Method of Excavation. The following paragraphs describe the various methods used to excavate different features of this work.

4-02.1 Stripping. Stripping excavation involved removal of organic material from beneath the levee embankment limits plus an additional five feet outside the toe. This excavation was done using motorized, rubber tired scrapers. The average depth of removal was six inches except between Stations 813+00 and 821+50 where the depth of top soil and dumped overburden varied from one to four feet deep as was indicated on the boring logs. There was a wet swampy area covered with a growth of trees and cattails (reedy marsh plants) between Stations 775+50 and 778+50. This area contained between three and five feet of very wet soft material that had to be removed by tracked backhoe before a suitable solid foundation material was reached. After the unstable material in this area was removed, the foundation was treated by conventional equipment in the normal manner. Except for T-wall monoliths 49 and 50, the foundations under the concrete wall and closure structures were determined to be suitable after excavating to required grades. At T-wall monoliths 49 and 50 a dark black organic material containing roots was encountered after excavation to required grades; removal of this material and refill with suitable foundation material was required. Excavation of the unsuitable foundation material for the levee and wall between Stations 825+00 and 833+00 was accomplished with suitable foundation material being encountered at the elevations shown in the contract documents.

4-02.2 Inspection Trench. An inspection trench was excavated in the levee foundation as required by the contract documents. The trench was excavated by rubber tired scrapers assisted by push tractor. The trench was excavated to sufficient width to permit the use of dozers and rollers to recompact the material after the subsurface ground conditions were inspected.

4-03 Foundation Preparation. The earth embankments for this section of the project were founded on essentially the same type of foundation material throughout the entire length. Accordingly the foundation preparation procedures were basically consistent for all reaches of the earth levee. The preparation consisted of thoroughly breaking the foundation soil to a depth of six inches by using a construction disc, bringing the in situ material to the proper moisture content and recompacting the material with six passes of an approved roller. After this operation was performed to the satisfaction of the Government, embankment placement proceeded in accordance with the contract requirements. This procedure also applied to the in situ material encountered after removal of unsuitable foundation material between Stations 825+00 and 828+75 and after removal of the unstable material between Stations 775+50 and 778+50. In those areas where the concrete wall was constructed, the foundation required no extra or unusual treatment except monoliths 49 and 50 where unsuitable foundation material was removed and replaced with suitable material compacted by hand tampers. The special foundation excavation required between Stations 828+75 and 833+00 was accomplished to the specified elevation where suitable foundation material was encountered. Suitable compacted backfill was then placed to the lines and grades necessary to construct the wall sections. In all other areas the foundation was excavated to the lines and grades specified, the foundation was inspected and placement of concrete proceeded.

4-04 Deviations From Planned Conditions. Left of Levee Station 852+54 outside the limits of the levee but within the limits of Access Road A, a four foot diameter hole 35 feet deep was encountered during construction of Access Road A. The hole was cased with concrete pipe. Holes of this type are common in the area; they are dug to a depth where river gravel is encountered and effluent from septic tanks is piped into the hole instead of using lateral fields. Based upon guidance furnished by personnel from Geotechnical Branch, the hole was filled with sand to within three feet of original ground. The sand was flooded as it was placed in the hole. A three foot thick compacted clay cap was placed on the sand and the road embankment was placed as required by the contract. A photograph of the hole is included in the photographs at the end of this supplement (Station 852+84 L).

GATEWELLS

5-01 Locations of Gatewells. There were two gatewells constructed on this section of levee to provide drainage through the protection during periods when flooding is not occurring. A gatewell was constructed integrally with T-wall monolith 32 at Station 835+32.5 and was connected to an existing 36-inch diameter pipe under Dixie Highway. Location of this gatewell can be identified on Plate No. 10 included with this supplement. The other gatewell constructed on this section of levee was located at Station 767+12⁺ on the centerline of survey traverse along the railroad embankment. This gatewell was constructed on an existing 48-inch diameter pipe that provided drainage under the existing railroad embankment which is an integral part of the protection project as discussed in paragraph 1-01. Location of this gatewell in reference to the project can be identified on Plate No. 12 with this supplement.

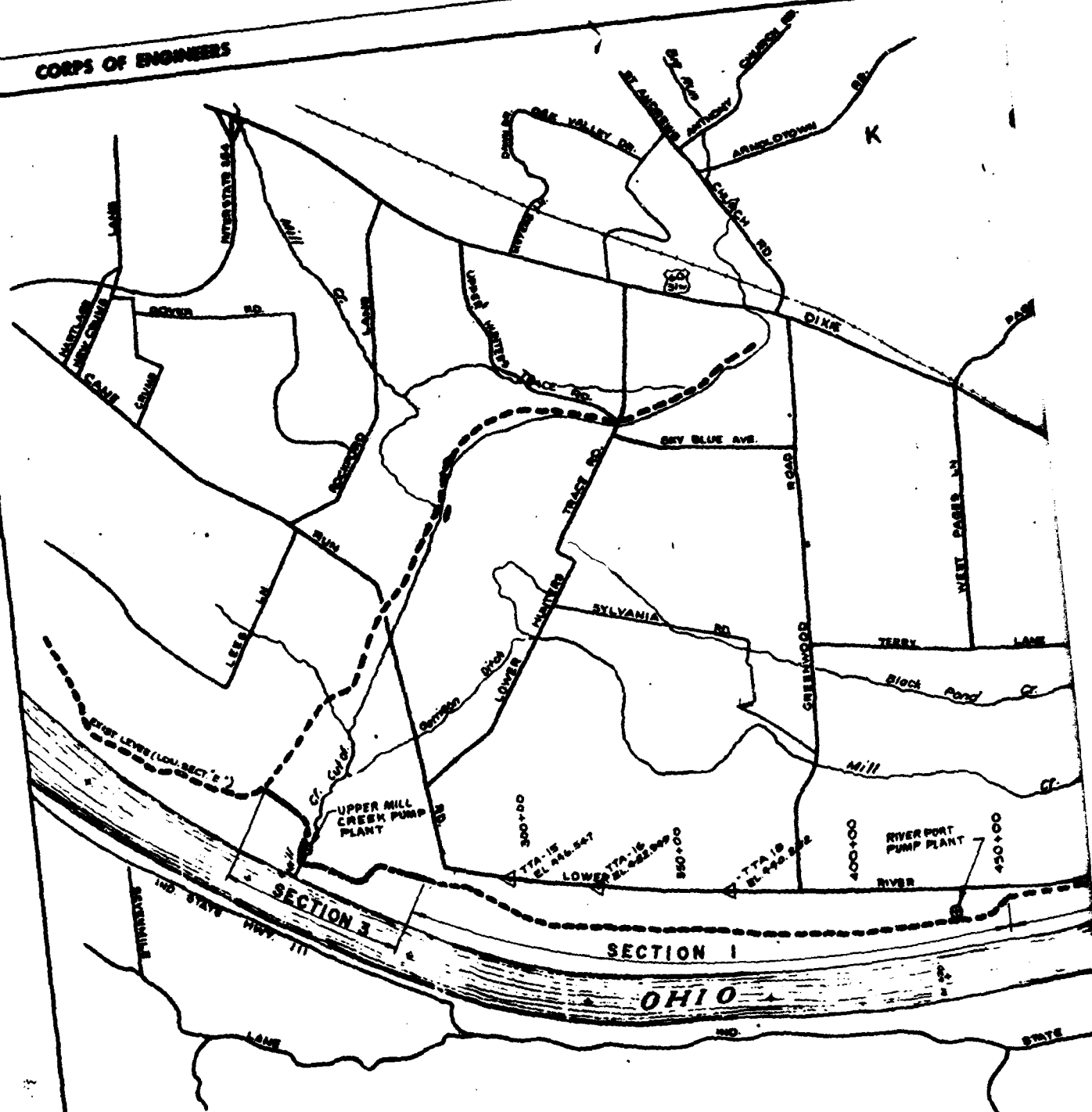
5-02 Deviations from Planned Conditions. There were no deviations from planned conditions in construction of the gatewells. Excavations were made to the planned lines and grades; suitable foundation material was encountered and construction of the gatewells proceeded.

POSSIBLE FUTURE PROBLEMS

6-01 Conditions That Could Produce Problems. There were no founding conditions encountered that are anticipated to produce future problems. The only conditions that deviated from planned conditions were discussed in paragraphs 4-02.1 and 4-04.

6-02 Recommended Observations. Observations should be made immediately after flood situations where water has been against the levee for indications of sliding.

CORPS OF ENGINEERS



GENERAL NOTES

CONSTRUCTION PRIORITIES

- (1) AN INITIAL TURN OF CONSTRUCTION SHALL BE THE BUILDING OF THE CONSTRUCTION ROAD FROM THE RAILROAD TO THE I.C. GOLF B.R. (ROAD "A"), AND THE CONSTRUCTION ROAD FROM THE RAILROAD TO RT HWY 44 (ROAD "B").
- (2) PRIORITY SHALL BE GIVEN TO COORDINATION WITH L.S. & R. FOR GAS LINE RELOCATION. THE DISCUSSION UNDER "ABANDONMENT OR RELOCATION OF UTILITIES." THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION WITH UTILITY COMPANIES.

EXISTING UTILITIES

UTILITIES INDICATED ON THE PLANS ARE AS KNOWN. OTHER UTILITY LINES FOUND IN THE FIELD SHALL BE BROUGHT PROMPTLY TO THE ATTENTION OF THE CONTRACTOR OFFICE TO DETERMINE IF TOLERANCE IS REQUIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES FOUND OR NOT SHOWN ON PLANS. ANY NEW UTILITY DISCOVERED OR EXPOSED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE GOVERNMENT. REPAIRS SHALL BE MADE TO PREVENT DAMAGE TO THE CONSTRUCTION. REPAIRS SHALL BE MADE TO PREVENT DAMAGE TO THE CONSTRUCTION. REPAIRS SHALL BE MADE TO PREVENT DAMAGE TO THE CONSTRUCTION.

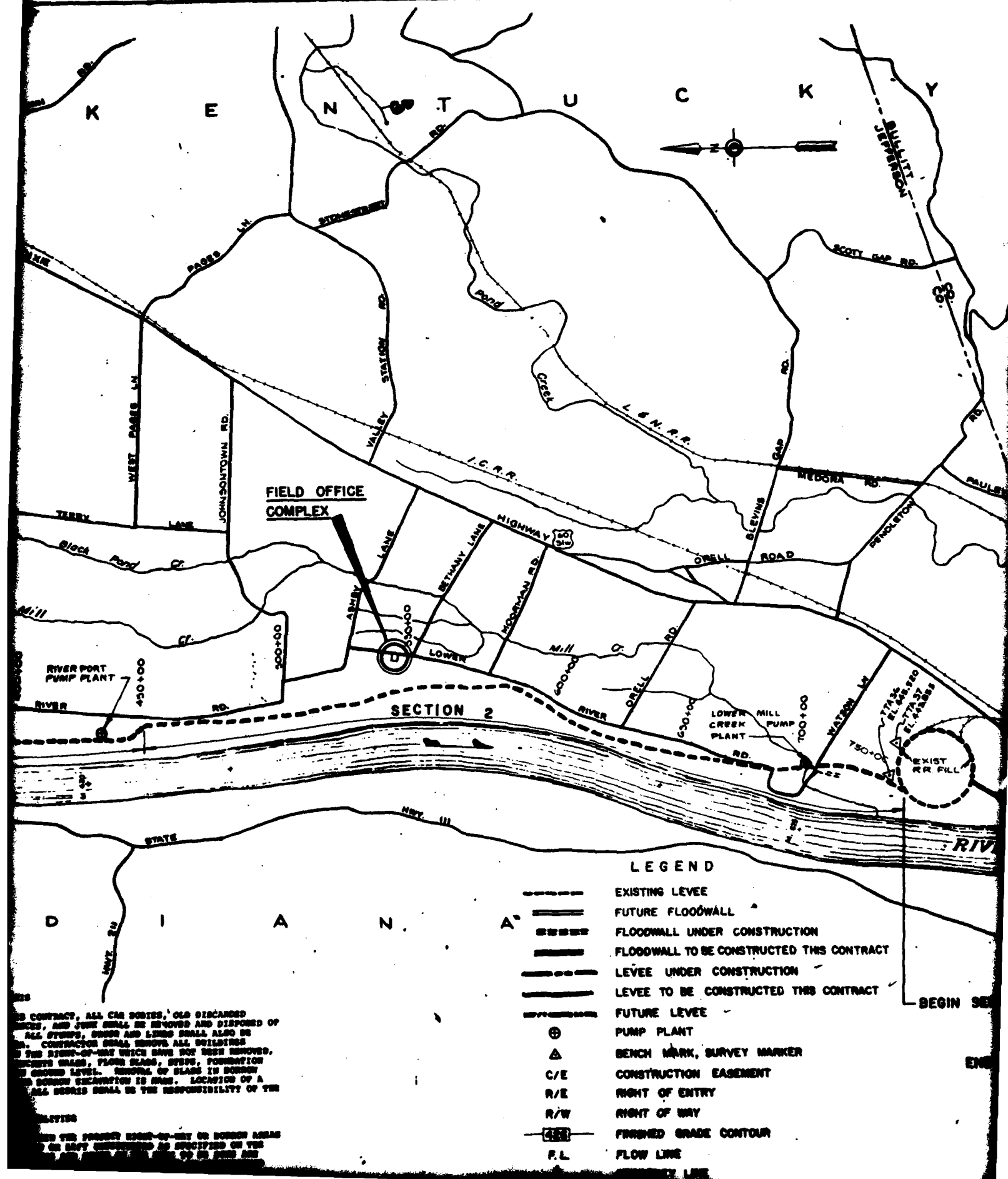
UNDER SPECIAL PROVISIONS THAT ARE WITHIN CONSTRUCTION LIMITS OF THE PROJECT CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE UTILITY COMPANIES TO FACILITATE TIMELY ACCOMPLISHMENT OF THE PROJECT. RELOCATION OF UTILITIES CROSSING LINES ALONGSIDE OR LOCATED WITHIN EXISTING AREAS SHALL BE TREATED AS SUCCESSORS UNDER "ABANDONMENT OR RELOCATION OF UTILITIES."

REMOVAL OF STRUCTURES & DEBRIS

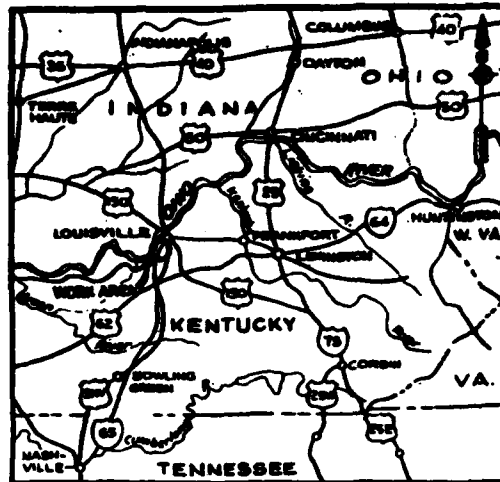
DURING THE COURSE OF THIS CONTRACT, ALL CAR BODIES, OLD OR APPLIANCES AND FURNITURE, FENCES, AND JUNK SHALL BE REMOVED FROM THE PROJECT AREA. ALL STOPS, DUMPS AND LINES SHALL BE REMOVED FROM THE PROJECT AREA. CONTRACTOR SHALL REMOVE ALL UTILITIES INDICATED ON DRAWINGS WITHIN THE RIGHT-OF-WAY WHICH HAVE NOT BEEN REMOVED OR ARE BELOW GROUND LEVEL. REMOVAL OF DEBRIS, WALLS OR FOOTINGS AT OR BELOW GROUND LEVEL. REMOVAL OF DEBRIS SHALL BE NOT REQUIRED WHEN NO GROUND ELEVATION IS MADE. A SUITABLE SITE FOR DISPOSAL OF ALL DEBRIS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

ABANDONMENT OR RELOCATION OF UTILITIES

- (1) ALL EXISTING UTILITIES WITHIN THE PROJECT RIGHT-OF-WAY SHALL BE TO BE ABANDONED OR RELOCATED OR LEFT UNCHANGED AS SPECIFIED ON THE PLANS. THE UTILITY COMPANIES AND SOME OF THE UTILITIES ARE ALSO LISTED ON THIS TABLE. RELOCATION OF ANY UTILITIES ON AREAS LISTED ON THIS TABLE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

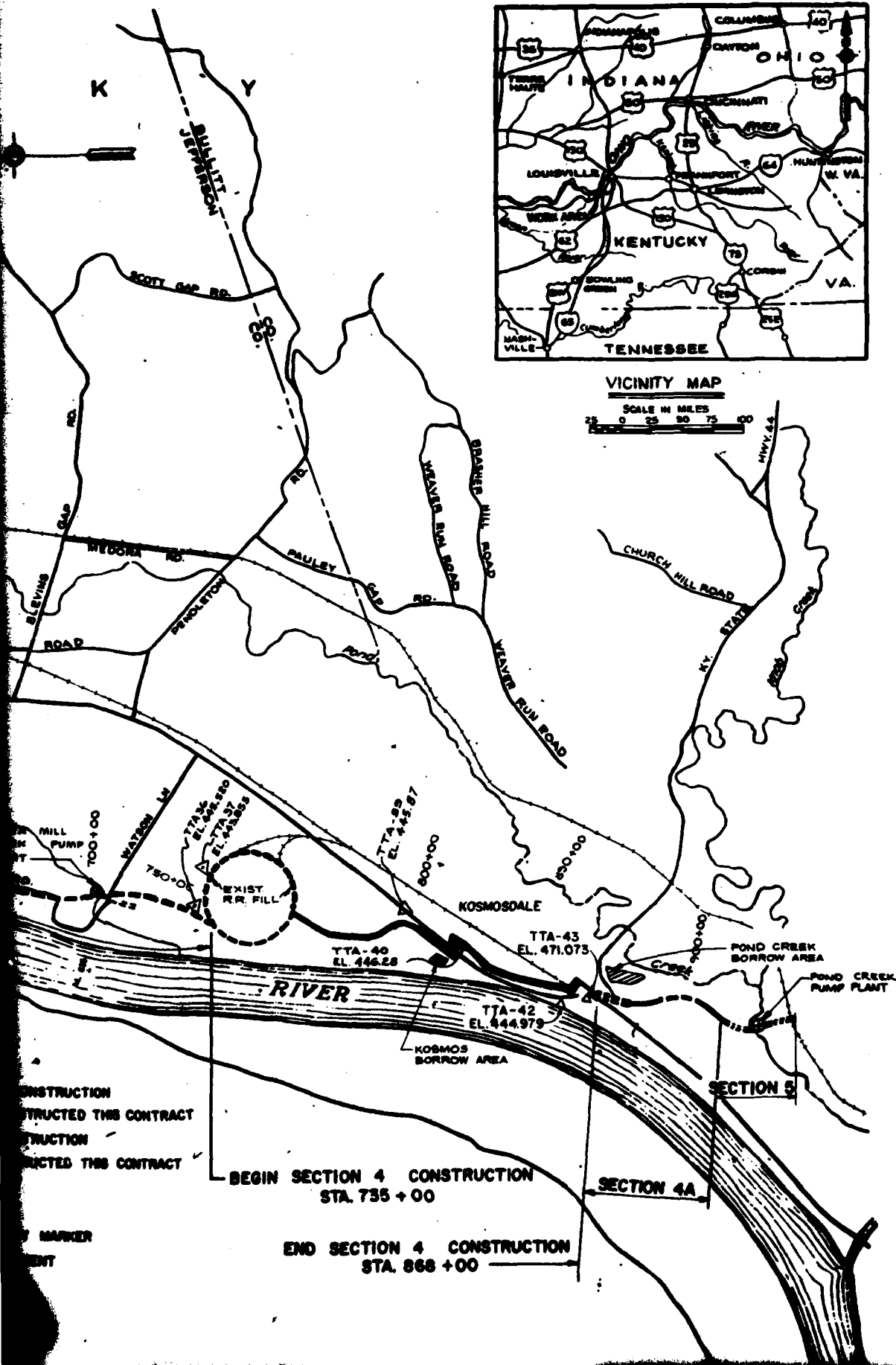


U. S. ARMY



VICINITY MAP

SCALE IN MILES
0 25 50 75 100



CONSTRUCTION
STRUCTURED THIS CONTRACT
CONSTRUCTION
STRUCTURED THIS CONTRACT

BEGIN SECTION 4 CONSTRUCTION
STA. 735 + 00

END SECTION 4 CONSTRUCTION
STA. 868 + 00

GENERAL NOTES

CONSTRUCTION PRIORITIES

- (1) AN INITIAL ITEM OF CONSTRUCTION SHALL BE THE BUILDING OF THE CONSTRUCTION ROAD FROM HUNTERDALE SOUTH TO THE I.C.-GULF R.R. (ROAD "A"), AND THE CONSTRUCTION ROAD FROM THE RAILROAD TO HWY 46 (ROAD "B").
- (2) PRIORITY SHALL BE GIVEN TO COORDINATION WITH L.G. & E. FOR GAS LINE RELOCATIONS. SEE DISCUSSION UNDER "ABANDONMENT OR RELOCATION OF UTILITIES." THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION WITH UTILITY COMPANIES.

EXISTING UTILITIES

UTILITIES INDICATED ON THE PLANS ARE AS KNOWN. OTHER UTILITY LINES FOUND IN THE FIELD SHALL BE BROUGHT PROMPTLY TO THE ATTENTION OF THE CONTRACTING OFFICER TO DETERMINE IF TREATMENT IS REQUIRED. THE CONTRACTOR SHALL USE REASONABLE CARE IN EXCAVATING ON THIS PROJECT SO AS NOT TO DISTURB ANY EXISTING UNDERGROUND UTILITY LINES WHETHER SHOWN OR NOT SHOWN ON PLANS. ANY KNOWN UTILITY DISTURBED OR DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED OR REPLACED BY CONTRACTOR AT NO COST TO THE GOVERNMENT. REASONABLE CARE TO AVOID DAMAGE TO PIPELINES SHALL INCLUDE SEARCH AND INQUIRY AS DIRECTED BY THE CONTRACTING OFFICER.

WHERE UTILITY PERSONNEL MUST WORK WITHIN CONSTRUCTION LIMITS OF THE PROJECT CONTRACTOR SHALL COORDINATE CONSTRUCTION OPERATIONS WITH THE UTILITY COMPANY TO FACILITATE TIMELY ACCOMPLISHMENT OF THE ALTERATION. SUBSURFACE UTILITIES CROSSING LEVEE ALIGNMENT OR LOCATED WITHIN BORROW AREAS SHALL BE TREATED AS DISCUSSED UNDER "ABANDONMENT OR RELOCATION OF UTILITIES."

QUANTITY SURVEY

THE CONTRACTOR SHALL FURNISH ALL PERSONNEL, EQUIPMENT AND MATERIAL NECESSARY TO MAKE, IN ADDITION TO ORIGINAL AND FINAL SURVEYS, INTERMEDIATE SURVEYS AT THE END OF EACH CONSTRUCTION SEASON TO DETERMINE ALL EXCAVATION AND EMBANKMENT DED ITEMS OF WORK ACCOMPLISHED DURING THE PREVIOUS SEASON. THESE SURVEYS SHALL BE MADE AS DIRECTED BY AND USING METHODS APPROVED BY THE CONTRACTING OFFICER. THE SURVEYS SHALL INCLUDE A MINIMUM OF A CROSS SECTION AT EACH NUMBERED FOOT STATION WITHIN THE CURRENT WORK AREA AND SHALL SHOW THE FULL EXTENT OF THE EXCAVATION AND EMBANKMENT ACCOMPLISHED IN EACH SEASON. THESE INTERMEDIATE CROSS SECTIONS MAY BE USED AS FINAL SECTIONS UPON APPROVAL OF THE CONTRACTING OFFICER.

UTILIZATION OF BORROW

EXCAVATED MATERIAL NOT SUITABLE FOR EMBANKMENT MAY BE WASTED IN PREVIOUSLY EXCAVATED BORROW AREAS AND SHALL BE SLOPED TO DRAIN AS DIRECTED BY THE CONTRACTING OFFICER.

BORROW EXCAVATION SHALL BE REMOVED IN A CONTINUOUS AND REASONABLE UNIFORM MANNER OF CUT. CONTOURS SHOWN IN BORROW AREAS ARE THE LOWER LIMITING ELEVATIONS OF BORROW. OPERATION OF BORROW PIT SHALL BE SUCH THAT FINE GRAINAGE IS MAINTAINED AT ALL TIMES. FINISHED BACKSLOPES WITHIN BORROW AREAS SHALL BE NO STEEPER THAN 1 VERTICAL TO 3 HORIZONTAL.

THE AREA ON THE RIVERSIDE OR LANDSIDE OF THE LEVEE SHALL BE EXCAVATED OR BLANKET FILLED AS NECESSARY TO DRAIN AWAY FROM LEVEE TOES. LEVEE GRADES SHOWN ON DRAWINGS ARE NET GRADES.

REMOVAL OF STRUCTURES & DEBRIS

DURING THE LENGTH OF THIS CONTRACT, ALL CAR BODIES, OLD DISCARDED APPLIANCES AND FURNITURE, FENCES, AND JUNK SHALL BE REMOVED AND DISPOSED AWAY FROM THE PROJECT AREA. ALL STUMPS, BRUSH AND LIMBS SHALL ALSO BE REMOVED FROM THE PROJECT AREA. CONTRACTOR SHALL REMOVE ALL BUILDINGS INDICATED ON DRAWINGS WITHIN THE RIGHT-OF-WAY WHICH HAVE NOT BEEN SEEN AND ANY REMAINING DEBRIS, CONCRETE WALKS, FLOOR SLABS, STEPS, FOUNDATION WALLS OR FOOTINGS AT OR BELOW GROUND LEVEL. REMOVAL OF SLABS IN BORROW AREAS IS NOT REQUIRED WHERE NO BORROW EXCAVATION IS MADE. LOCATION OF SUITABLE SITE FOR DISPOSAL OF ALL DEBRIS SHALL BE THE RESPONSIBILITY OF CONTRACTOR.

ABANDONMENT OR RELOCATION OF UTILITIES

(1) ALL EXISTING UTILITIES WITHIN THE PROJECT RIGHT-OF-WAY OR BORROW ARE TO BE RELOCATED OR ABANDONED OR LEFT UNDISTURBED AS SPECIFIED ON TABLE ON SS 4. THE UTILITY OWNERS AND SCOPE OF THE WORK TO BE DONE IS ALSO LISTED ON THIS TABLE. RELOCATION OF ANY ABOVEGROUND OR SUBSURFACE UTILITIES SHALL BE ACCOMPLISHED BY THE UTILITY OWNER.

(2) ALL UNDERGROUND PIPES AND CABLES WITHIN THE RIGHTS-OF-WAY AND AREAS SCHEDULED TO BE ABANDONED SHALL BE REMOVED BETWEEN POINTS LOCATED PER RIVERSIDE OR LANDSIDE OF THE RESPECTIVE TOES OF THE LEVEE OR RESPECTIVE WALL BASE TOES.

(3) IN THE REACH OF PROJECT BETWEEN THE I.C.-GULF R.R. AND DIXIE HWY OVERPASS, MAJOR L.G. & E. GAS TRANSMISSION RELOCATIONS ARE TO BE DONE. CONSTRUCTION OF THE LEVEE SHALL BE SCHEDULED SO THAT A SEGMENT OF THE DIXIE HWY OVERPASS WILL BE COMPLETE TO FINAL GRADE AND CROSS INCLUDING AN OVERBUILT SECTION, TO ACCOMMODATE RELOCATION OF ONE OF THE GAS LINES. SEE SS 50. ACCORDINGLY, THE CONTRACTOR SHALL SCHEDULE HIS OPERATIONS SO AS TO PERMIT THESE RELOCATIONS AS EARLY AS POSSIBLE. A SPECIFIC TIME OF THE YEAR DURING WHICH THESE GAS LINE RELOCATIONS CAN BE DONE IS RESTRICTED. SEE THE SPEC. IN THIS REGARD L.G. & E. WILL NOT GUARANTEE GAS LINE RELOCATIONS DURING THE PERIOD 15 OCT THRU 15 APR.

ACCESS

CONTRACTOR WILL BE ALLOWED ACCESS TO THE PROJECT AREA FROM DIXIE HWY AND HWY 46 ON SHOULDER LANE WHERE INDICATED RIGHT-OF-WAY LINES INTERSECT HIGHWAYS. HOWEVER, SELECTION OF ACCESS POINTS SHALL BE CHOSEN SO THAT ACTIVITIES OR MOVEMENT OF EQUIPMENT SHALL NOT INTERFERE WITH NORMAL TRAFFIC ON THESE HIGHWAYS NOR POSE SAFETY HAZARDS. GATES BE MAINTAINED DURING CONSTRUCTION WHEREVER ACCESS ROUTES TRAVERSE OR PENETRATE AREAS OF L.G. & E. CO.

PROPERTY SURVEY DATA

SURVEY DATA NEEDED TO ESTABLISH EXISTING RIGHT-OF-WAY LINES WILL BE AVAILABLE FOR CONTRACTOR'S USE PRIOR TO CONSTRUCTION. THIS ADDITIONAL SURVEY DATA, WHERE AVAILABLE, MAY BE OBTAINED FROM THE CONTRACTING OFFICER UPON REQUEST.

ALL CAR BODIES, OLD DISCARDED
AND JUNK SHALL BE REMOVED AND DISPOSED OF
PROPERLY. HOUSES AND LINES SHALL ALSO BE
REMOVED. CONTRACTOR SHALL REMOVE ALL BUILDINGS
AND STRUCTURES WHICH HAVE NOT BEEN REMOVED.
WATER, FLOOD WALLS, STOPS, FOUNDATION
AND LEVEL. REMOVAL OF SLABS IN DORCH
AND EXCAVATION IS HERE. LOCATION OF A
CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE

WIDE

THE PROJECT RIGHT-OF-WAY ON DORCH AREAS
IS LEFT UNDISTURBED AS SPECIFIED ON THE
AND SCOPES OF THE WORK TO BE DONE ARE
FROM OF ANY ADJACENTS OR UNDERGROUND
THE UTILITY OWNERS.

AND WITHIN THE RIGHTS-OF-WAY AND WHICH
IS BE REMOVED BETWEEN POINTS LOCATED 10
RESPECTIVE TIES OF THE LEVEE OR

ON THE I.C.-GOLF S.S. AND DIXIE HWY
LINE RELOCATIONS ARE TO BE DONE.
SCHEDULED SO THAT A SEGMENT OF LEVEE AT
POINTS TO FINAL GRADE AND CROSS SECTION,
ACCOMMODATE RELOCATION OF ONE OF THESE
THE CONTRACTOR SHALL SCHEDULE HIS
RELOCATIONS AS EARLY AS POSSIBLE. THE
SUCH THERE WAS LINE RELOCATIONS CAN BE
IN THIS HURDLE S.S. S. WILL NOT
AND THE PERIOD 15 OCT 1980 15 APRIL.

AND TO THE PROJECT AREA FROM DIXIE HWY
INDICATED RIGHT-OF-WAY LINES INTERSECT
OF ACCESS POINTS SHALL BE CROSS WITH
TRAVEL OF EQUIPMENT SHALL NOT INTERFERE
AND FOR FOR SAFETY BARBERS. OWNERS SHALL
REMOVING ACCESS ROUTES THROUGH SECURITY

EXISTING BY NEW RIGHTS-OF-WAY LINES
ONE PRIOR TO CONSTRUCTION. THIS AND ANY
LINES, MAY BE OBTAINED FROM THE

=====	FUTURE FLOODWALL
=====	FLOODWALL UNDER CONSTRUCTION
=====	FLOODWALL TO BE CONSTRUCTED THIS CONTRACT
=====	LEVEE UNDER CONSTRUCTION
=====	LEVEE TO BE CONSTRUCTED THIS CONTRACT
=====	FUTURE LEVEE
⊕	PUMP PLANT
△	BENCH MARK, SURVEY MARKER
C/E	CONSTRUCTION EASEMENT
R/E	RIGHT OF ENTRY
R/W	RIGHT OF WAY
428	FINISHED GRADE CONTOUR
F.L	FLOW LINE
℄	PROPERTY LINE
C.C.	CENTER TO CENTER
TYP	TYPICAL
F.B.	FLAT BOTTOM

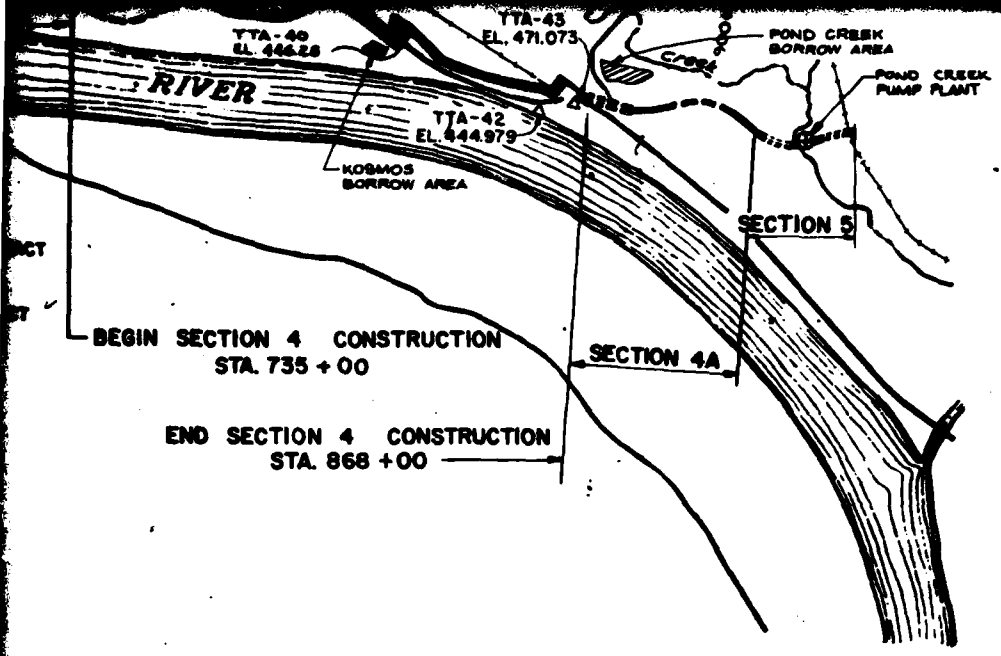
BEGIN SECTION
STA. 7

END SECTION

NOTE: ALL ELEVATIONS GIVEN IN THESE PLANS ARE BASED
ON LOUISVILLE CITY DATUM.

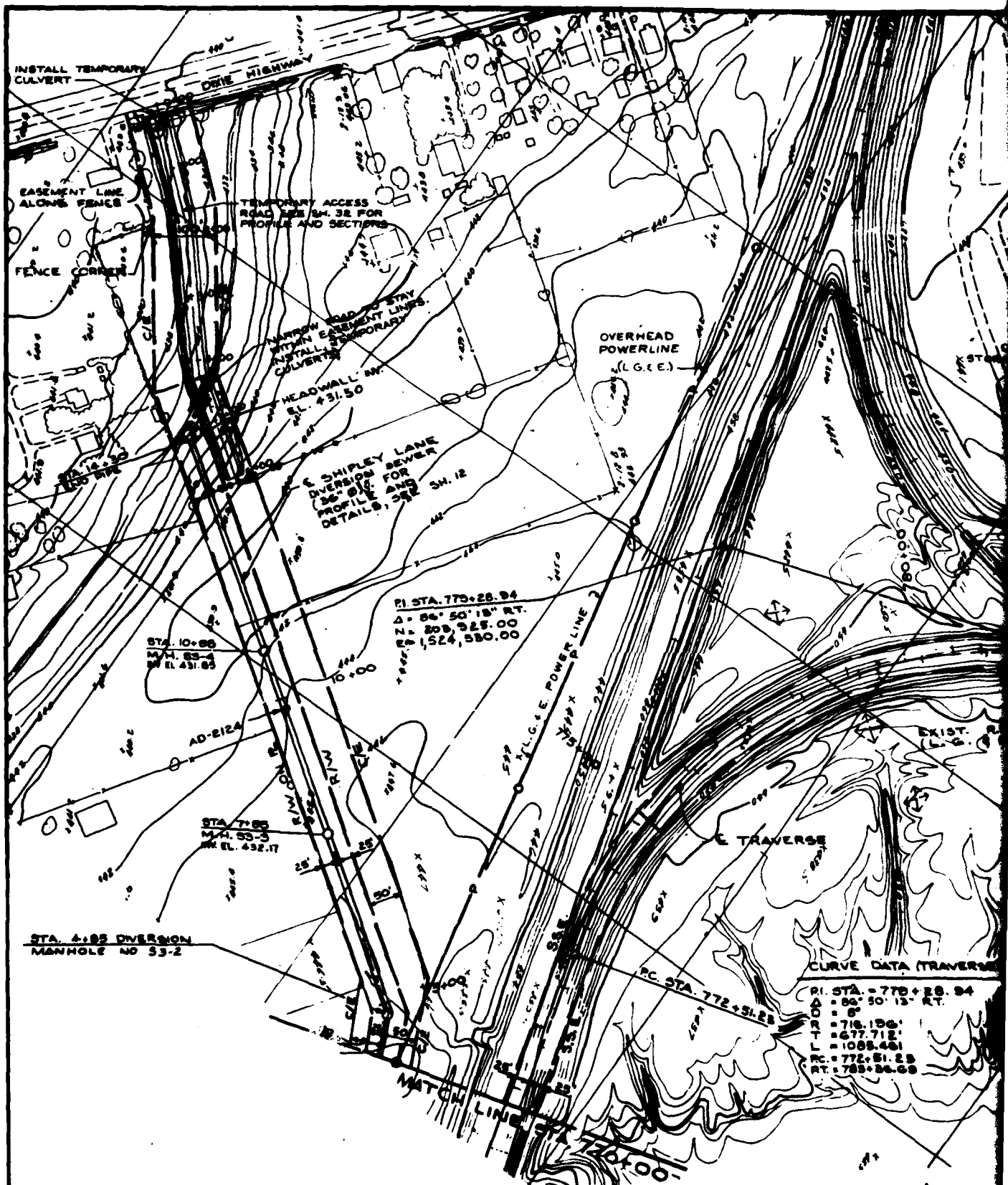
0 1000 FT

5



REVISION		DATE	DESCRIPTION	BY	CHK
U. S. ARMY ENGINEER DISTRICT, LOUISVILLE CORPS OF ENGINEERS LOUISVILLE, KENTUCKY					
DESIGNED		SOUTHWESTERN JEFFERSON COUNTY, KY. LOCAL FLOOD PROTECTION SECTION 4			
DRAWN		GENERAL PLAN, VICINITY MAP AND GENERAL NOTES			
CHECKED		DATE AUG 82			
APPROVED		SCALE 1" = 2000' DRAWING NUMBER 616-12.10/2			
S.A.M. T.M.J. MAP [Signature] [Signature]		PLATE 1			

CORPS OF ENGINEERS



STA. 4+85 DIVERSION
MANHOLE NO 53-2

STA. 10+85
M.H. 53-3
IN EL. 431.83

STA. 7+55
M.H. 53-3
IN EL. 432.17

PI STA. 775+28.94
 $\Delta = 86^{\circ} 50' 13''$ RT.
N = 209,925.00
ES = 1,524,530.00

CURVE DATA (TRAVERSE)

PI STA. = 775+28.94
 $\Delta = 86^{\circ} 50' 13''$ RT.
D = 6'
R = 716.106'
T = 677.712'
L = 1085.461'
PC STA. = 772+51.25
PT STA. = 783+84.69

NOTE:

1. ALL OFFSETS USED AS REFERENCE FOR R/W AND C/E LINES ARE BASED ON TRAVERSE LINE.

2. FOR TYPICAL SECTION OF LEVER, SEE SH.

CURVE DATA (TRAVERSE)

PI. STA. = 770 + 28.94
 Δ = 89° 50' 13" RT.
 ϕ = 6°
R = 716.196'
T = 677.712'
L = 1085.481'
PC = 772 + 51.25
PT = 785 + 34.69

PI STA. 774.63.28
Δ = 38° 37' 05" LT.
N = 203,502.30
E = 1,528,077.68

EQ. PI. STA. 768+44.04 BK. 1
PI STA. 773+52.00 A.M.
Δ = 31° 54' 46" LT
N = 203,346.01
E = 1523,209.17

E ACCESS RAMP, LG (E)
FOR DETAILED PLAN,
PROFILE AND SECTIONS
SEE SHEETS 14 E 15

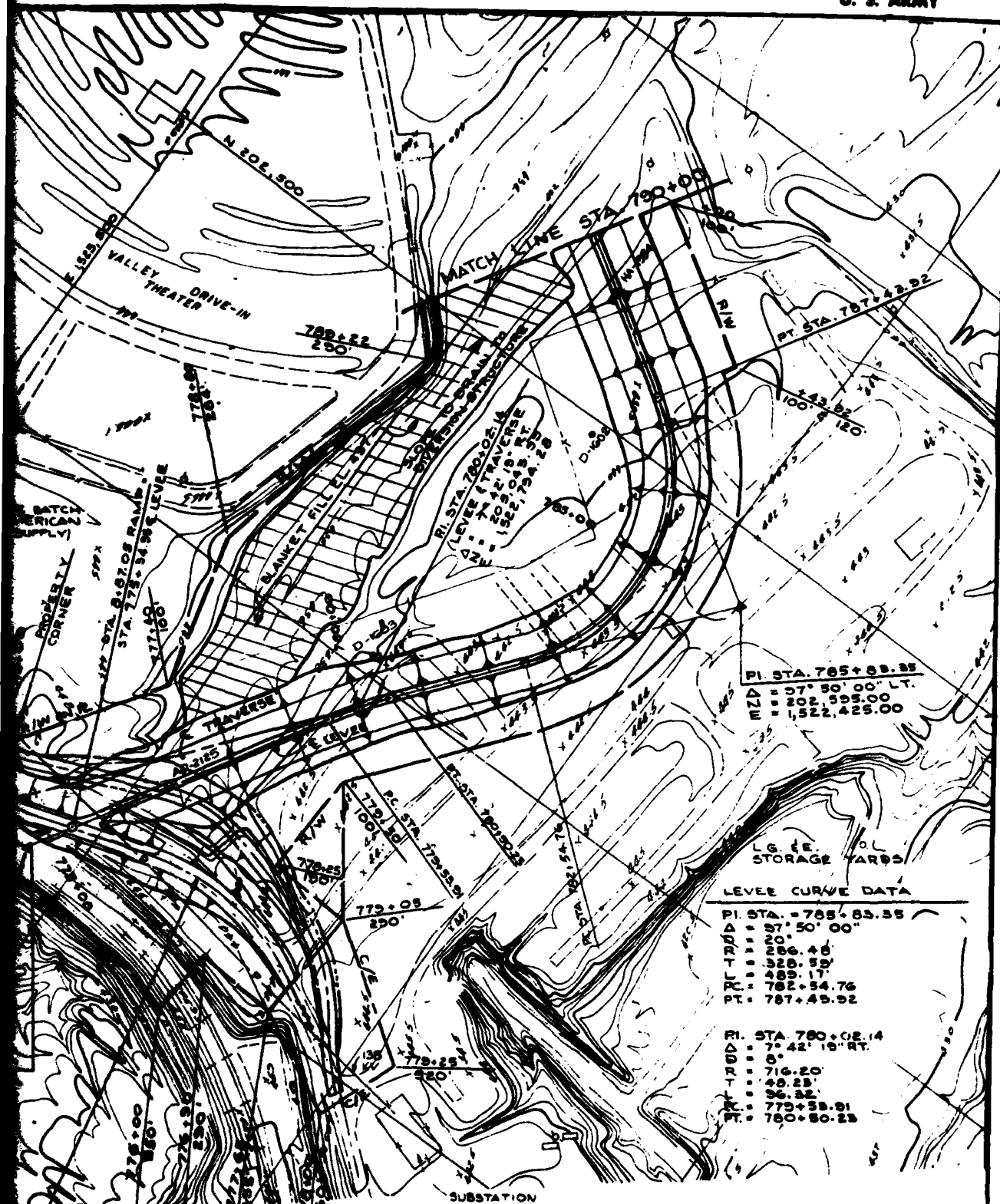
PLAN

100 0 100 200 FT

STA. 774+85
BEGIN LEVER
C RAMP
STA 775+34.95

ALL OFFSETS USED AS REFERENCE
FOR R/W AND C/E LINES ARE BASED
ON TRAVERSE LINE.

FOR TYPICAL SECTION OF LEVEE, SEE SH. 8

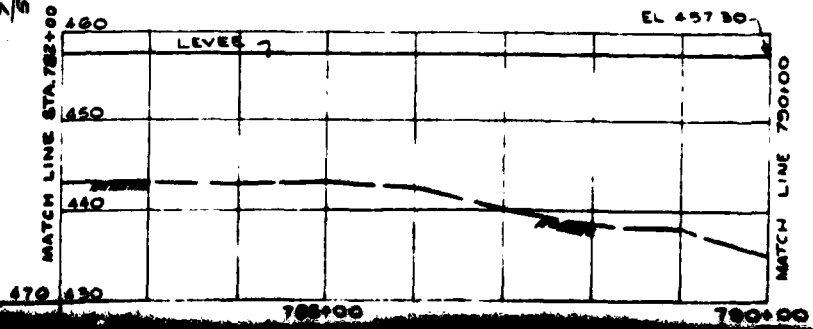


PI STA. 765+83.35
 $\Delta = 57^{\circ} 50' 00''$ LT.
 $LD = 202.555.00$
 $E = 1,522.425.00$

LG. & E. STORAGE YARDS

LEVEE CURVE DATA
 PI STA. = 765+83.35
 $\Delta = 57^{\circ} 50' 00''$
 $LD = 202.555.00$
 $R = 266.46$
 $T = 328.59$
 $L = 489.17$
 $PC = 762+54.76$
 $PT = 767+49.92$

PI STA. 780+02.14
 $\Delta = 7^{\circ} 42' 10''$ RT.
 $LD = 6$
 $R = 716.20$
 $T = 45.23$
 $L = 96.32$
 $PC = 779+55.91$
 $PT = 780+50.23$

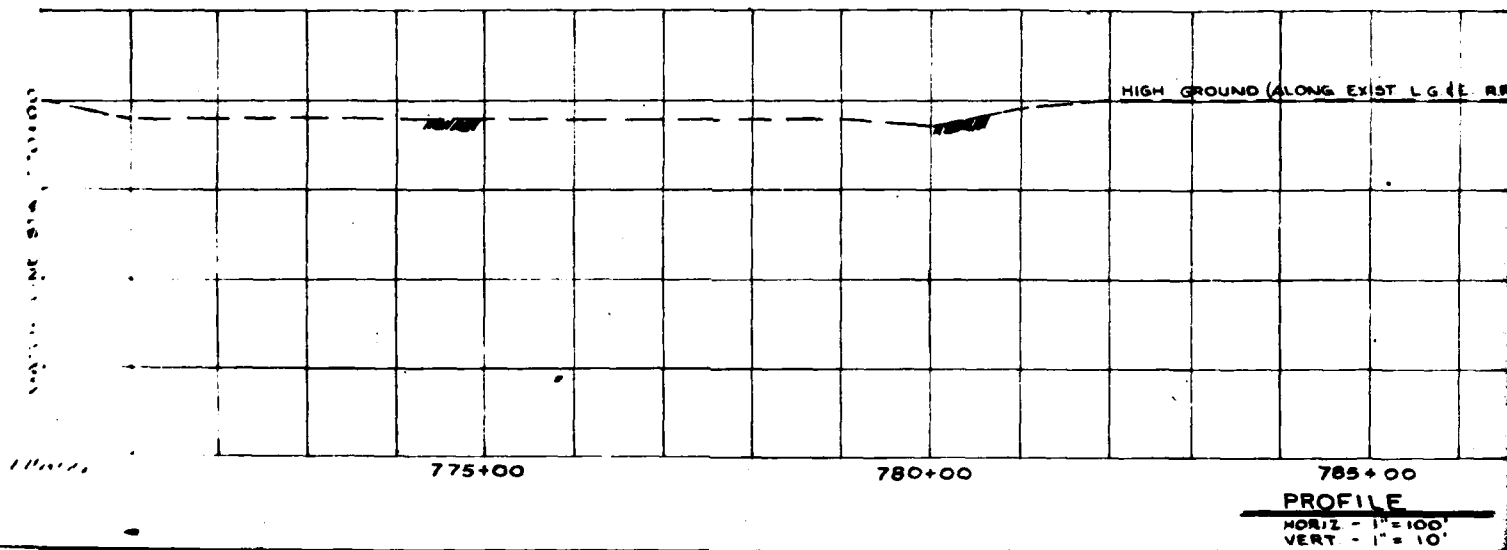




NOTE:

1. ALL OFFSETS USED AS REFERENCE FOR R/W AND C/E LINES ARE BASED ON TRAVERSE LINE.

2. FOR TYPICAL SECTION OF LEVEE, SEE SH. 8



4

CURVE DATA (TRAVERSE)

PI STA. = 778+28.94
 $\Delta = 89^{\circ} 50' 13''$ RT.
 $R = 8'$
 $LC = 716.196'$
 $LT = 677.712'$
 $L = 1085.461'$
 $EC = 772.5123$
 $ET = 783+26.63$

PI STA. 774+63.29
 $\Delta = 38^{\circ} 37' 05''$ LT.
 $N = 203,502.30$
 $E = 1,523,077.66$

EQ. PI STA. 788+44.04 BK.
 $\Delta = 31^{\circ} 54' 46''$ LT.
 $N = 203,546.01$
 $E = 1,523,209.17$

ACCESS RAMP - G (E)
 FOR DETAILED PLAN,
 PROFILE AND SECTIONS
 SEE SHEETS 14 & 15

PLAN

100 0 100 200 FT.

USED AS REFERENCE
 C/E LINES ARE BASED
 ON LINE.

SECTION OF LEVEE, SEE SH. 8

MATCH LINE STA. 782+00
 460
 450
 440

470 430

HIGH GROUND (ALONG EXIST. L.G.E. RR TRACKS)

HIGH GROUND
 (ALONG RR FILL)

LEVEE

EL. 457.35

EL. 457.35

EXIST. ACCESS ROAD
 L.G.E.E.

EQ. PI STA. 788+44.04 BK.
 PI STA. 773+54.00 AH (TRAVERSE)

PI STA. 774+63.29 (LEVEE)

STA. 774+05
 BEGIN LEVEE
 C RAMP
 STA. 775+34.95

MATCH LINE STA. 782+00
 460
 450
 440
 430
 420

785+00

775+00

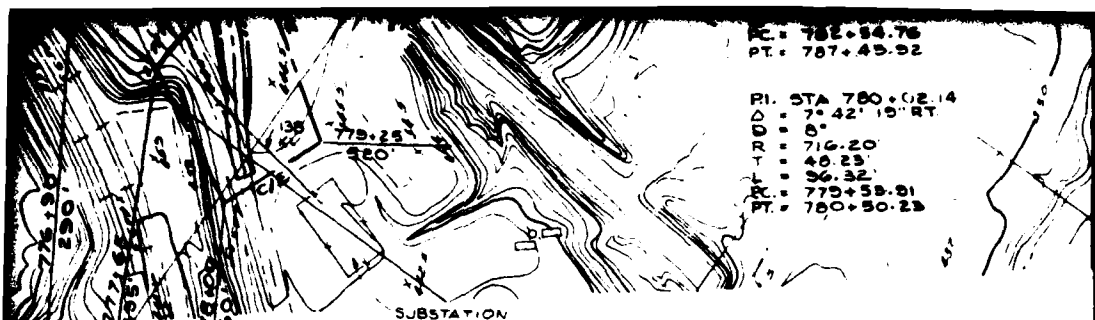
780+00

PROFILE

HORIZ. - 1" = 100'
 VERT. - 1" = 10'

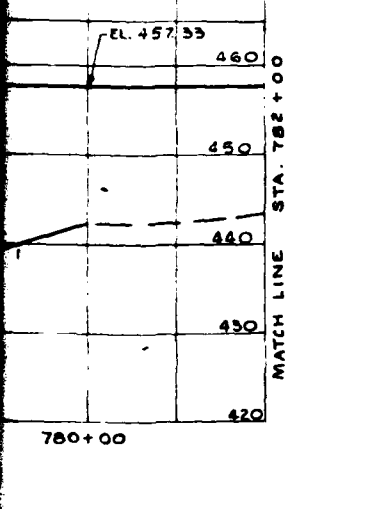
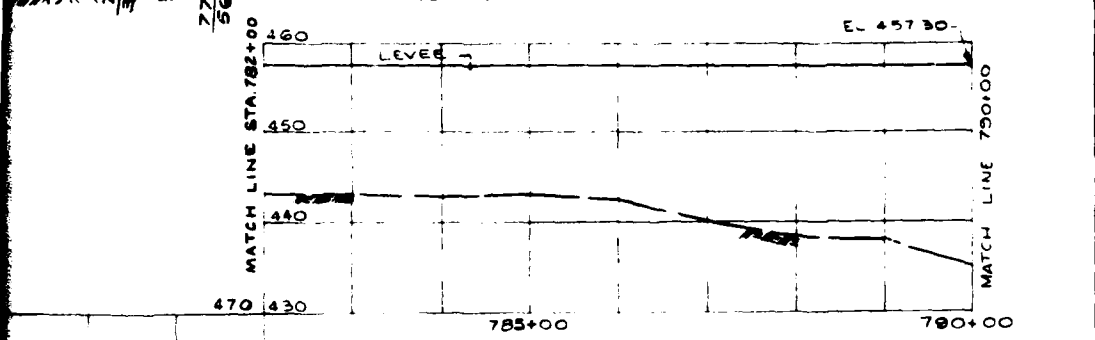
100 0 100 200 FT HORIZ
 10 0 10 20 FT VERT.

5



PC = 782+84.75
PT = 787+43.92

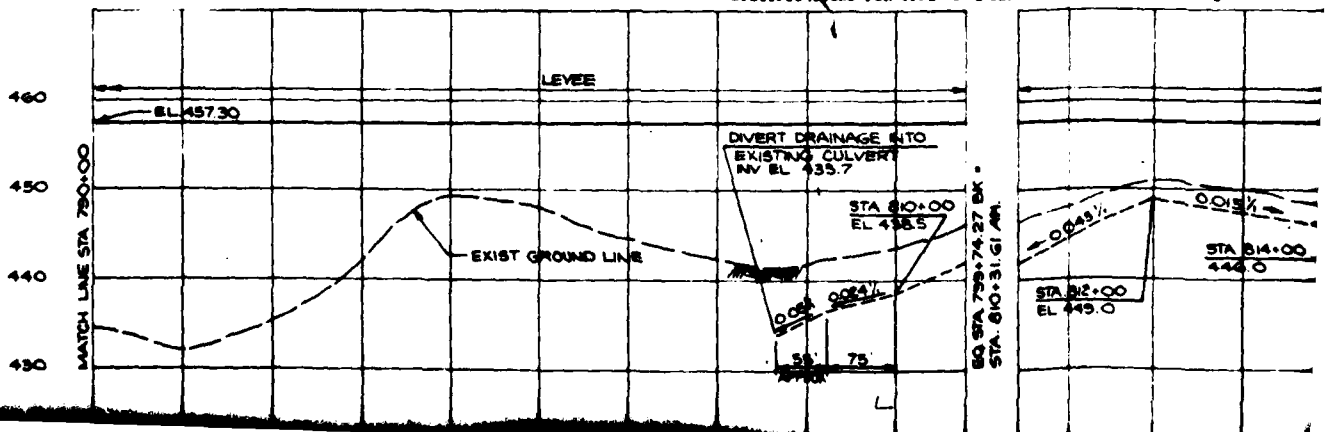
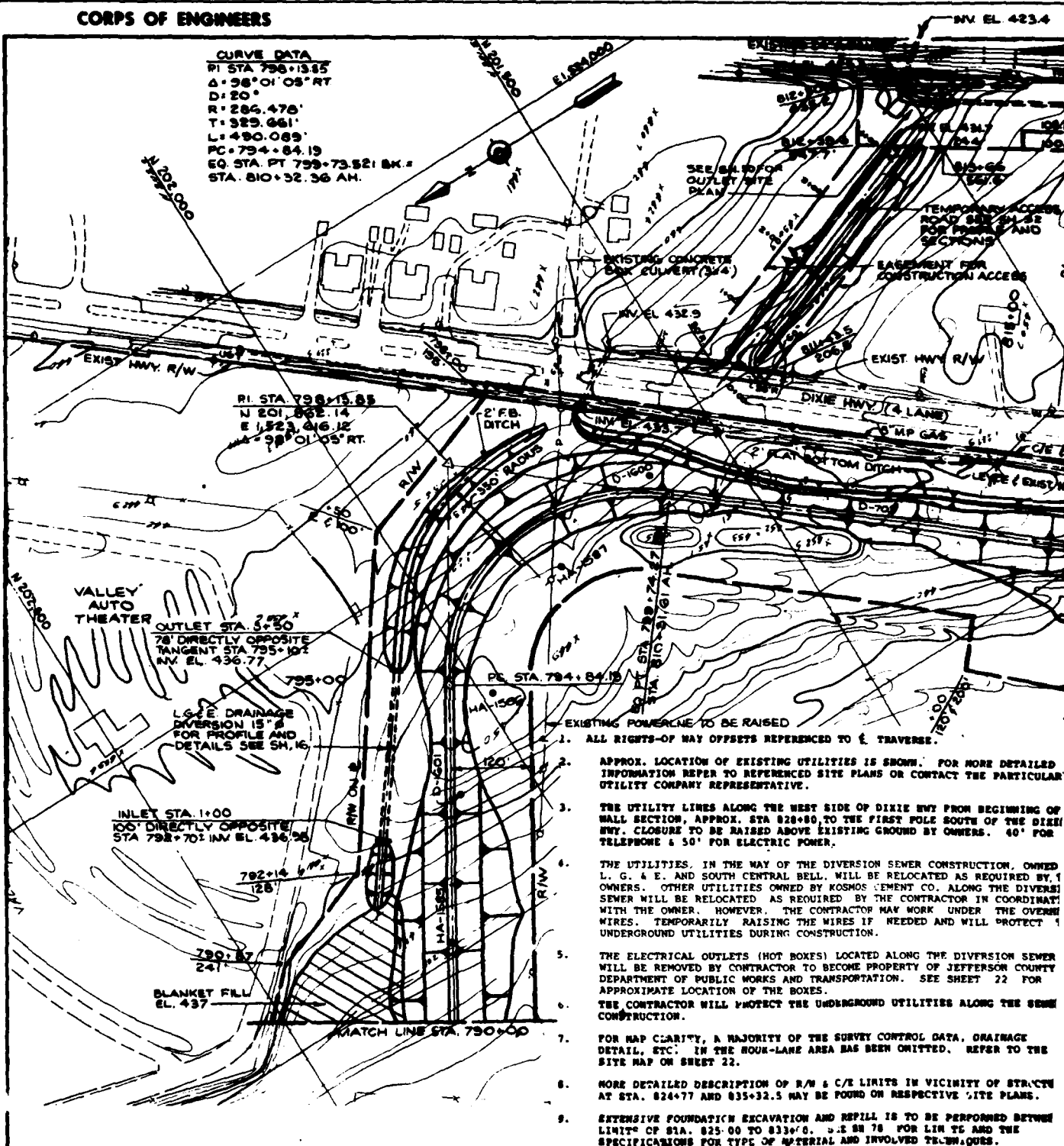
PI. STA 780+02.14
D = 7° 42' 19" RT
R = 716.20
T = 48.23
L = 36.32
X = 775+58.81
PT = 780+50.23

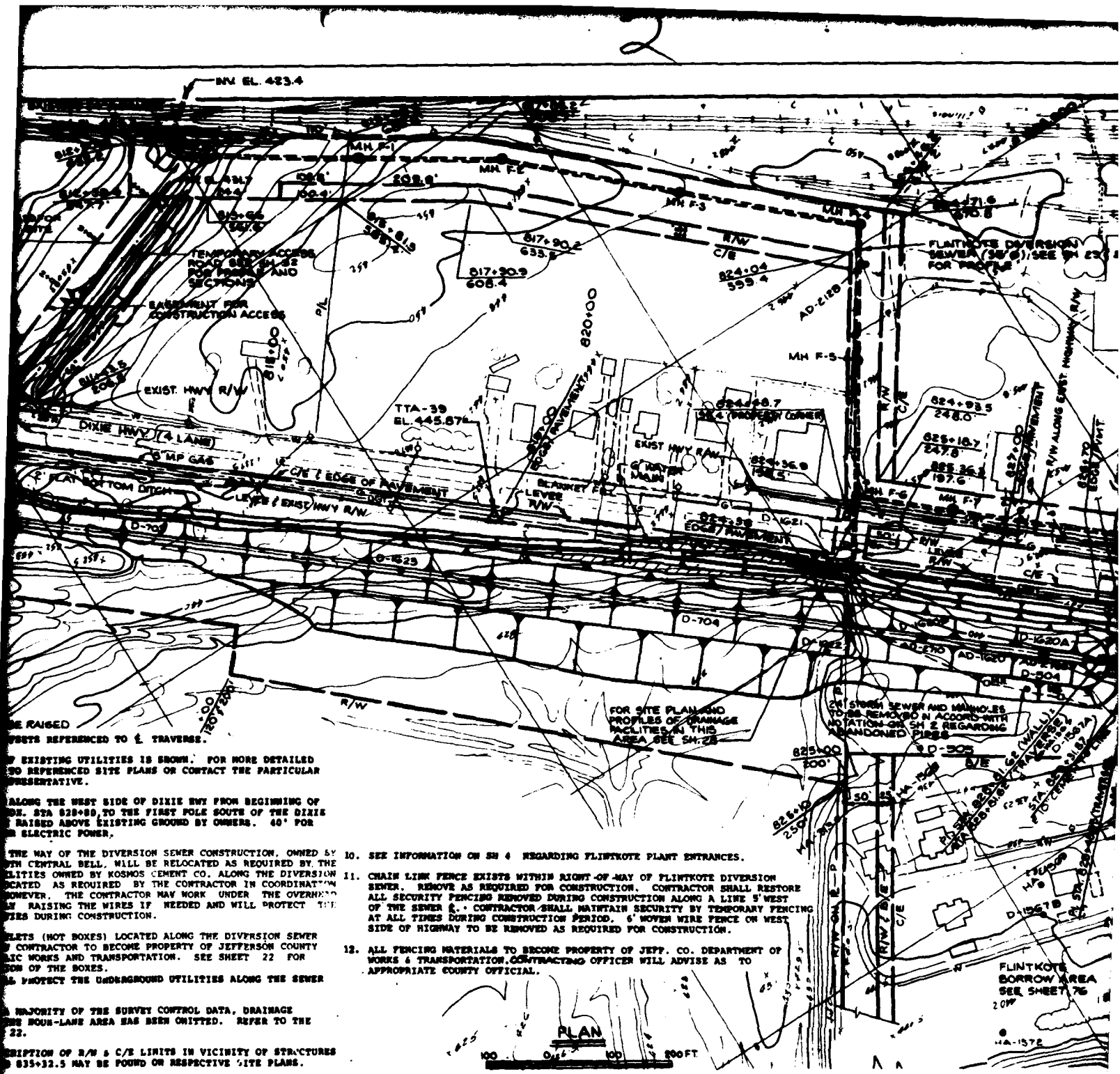


REVISION		DATE	DESCRIPTION	BY	APP'D.
<p align="center">U. S. ARMY ENGINEER DISTRICT, LOUISVILLE CORPS OF ENGINEERS LOUISVILLE, KENTUCKY</p>					
DESIGNED:		<p align="center">SOUTHWESTERN JEFFERSON COUNTY, KY. LOCAL FLOOD PROTECTION SECTION - 4</p>			
DRAWN:	TRACED:	<p align="center">PLAN AND PROFILE STA. 770+00 TO STA. 790+00</p>			
✓	R.O.L.				
CHECKED:					
M.A.R.					
SUBMITTED:					
APPROVED:					
AS SHOWN		DATE		AUG 82	
<p align="center">PLATE 2</p>			<p align="center">DRAWING NUMBER 616-12.10/6</p>		

6

CORPS OF ENGINEERS





BE RAISED
SYSTEMS REFERENCED TO 1. TRAVERSE.

IF EXISTING UTILITIES IS SHOWN. FOR MORE DETAILED
AND REFERENCED SITE PLANS OR CONTACT THE PARTICULAR
REPRESENTATIVE.

ALONG THE WEST SIDE OF DIXIE HWY FROM BEGINNING OF
STN. STA 828+80 TO THE FIRST POLE SOUTH OF THE DIXIE
RAISED ABOVE EXISTING GROUND BY OWNERS. 40' FOR
ELECTRIC POWER.

THE WAY OF THE DIVERSION SEWER CONSTRUCTION, OWNED BY
JEN. CENTRAL BELL, WILL BE RELOCATED AS REQUIRED BY THE
UTILITIES OWNED BY KOSMOS CEMENT CO. ALONG THE DIVERSION
LOCATED AS REQUIRED BY THE CONTRACTOR IN COORDINATION
HOWEVER, THE CONTRACTOR MAY WORK UNDER THE OVERHEAD
WIRING RAISING THE WIRES IF NEEDED AND WILL PROTECT THE
WIRES DURING CONSTRUCTION.

POLES (NOT BOXES) LOCATED ALONG THE DIVERSION SEWER
CONTRACTOR TO BECOME PROPERTY OF JEFFERSON COUNTY
ELECTRIC WORKS AND TRANSPORTATION. SEE SHEET 22 FOR
POSITION OF THE BOXES.

AL PROTECT THE UNDERGROUND UTILITIES ALONG THE SEWER

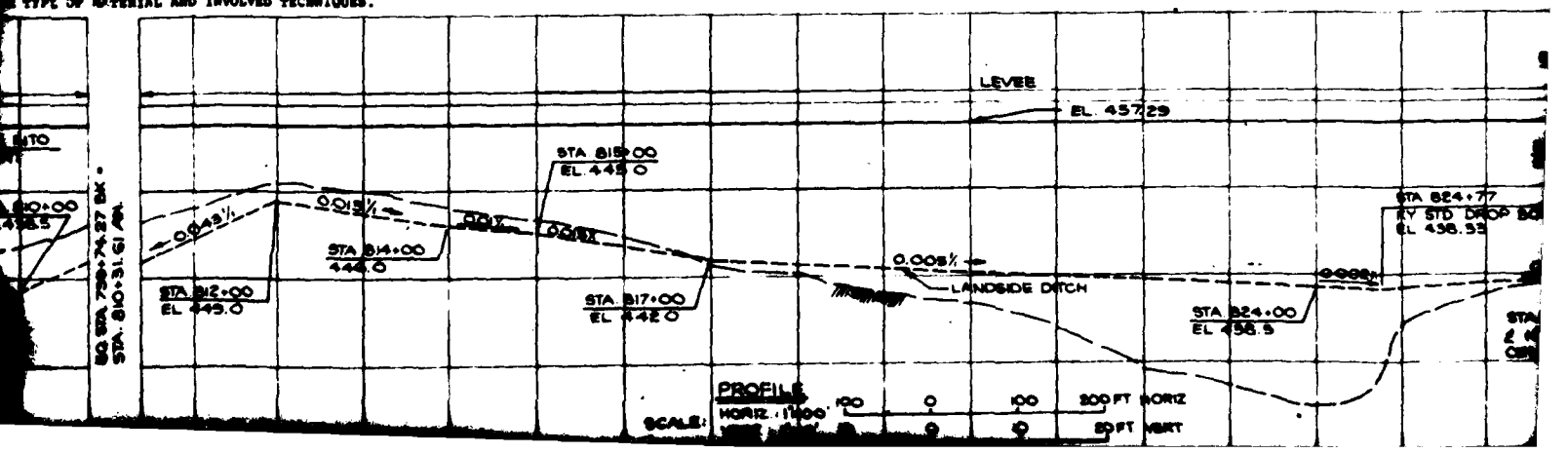
A MAJORITY OF THE SURVEY CONTROL DATA, DRAINAGE
AND FOUR-LANE AREA HAS BEEN OMITTED. REFER TO THE
SHEET 22.

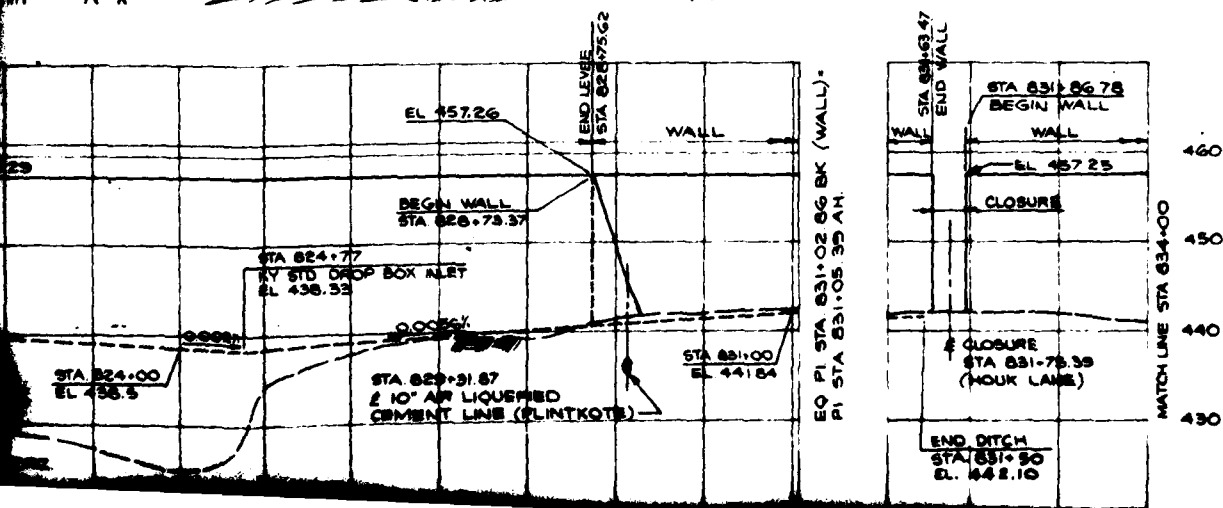
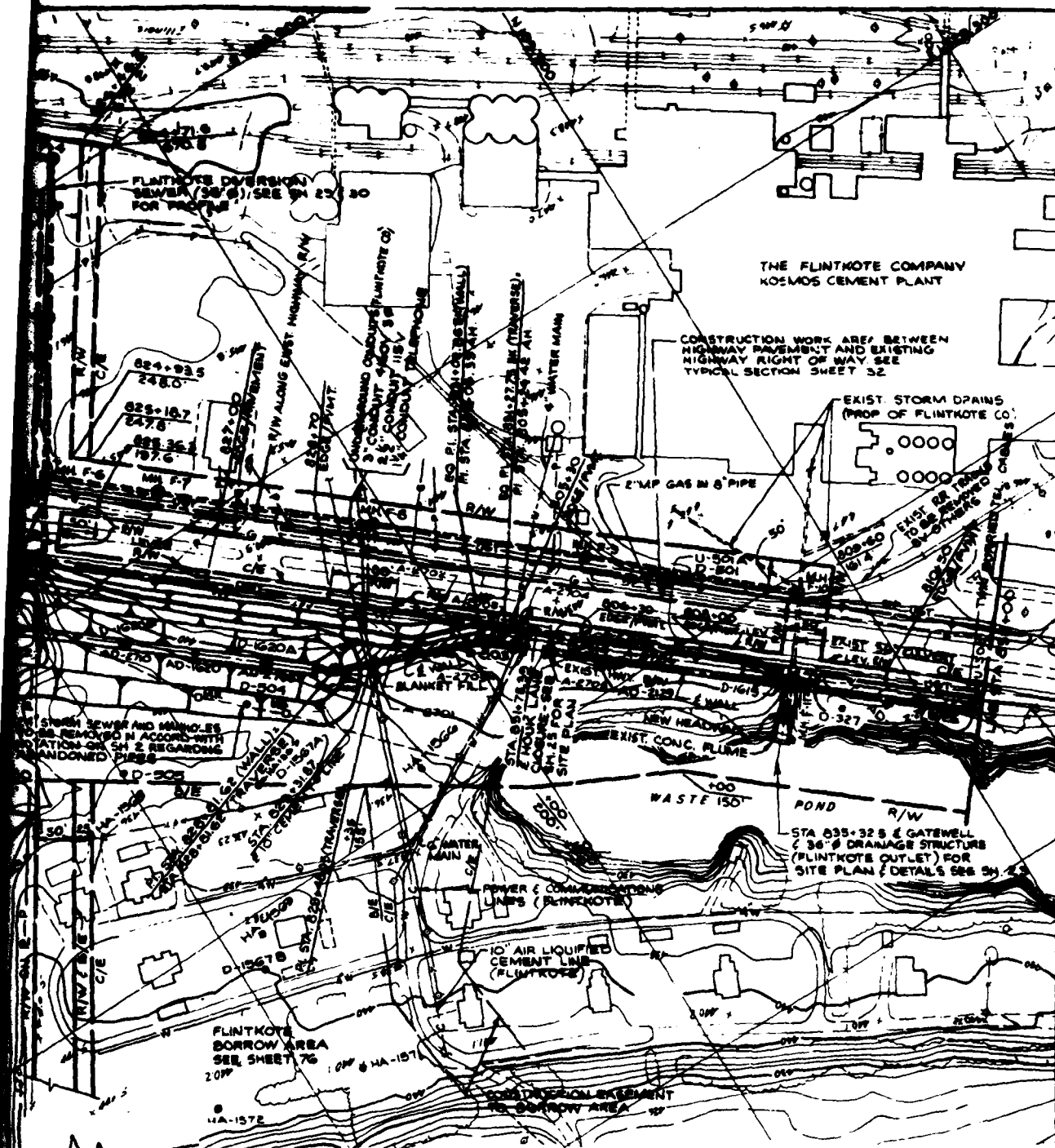
DESCRIPTION OF R/W & C/E LIMITS IN VICINITY OF STRUCTURES
835+32.5 MAY BE FOUND ON RESPECTIVE SITE PLANS.

EXCAVATION AND REFILL IS TO BE PERFORMED BETWEEN
828+00 TO 832+00. SEE SH 78 FOR LIMITS AND THE
TYPE OF MATERIAL AND INVOLVED TECHNIQUES.

10. SEE INFORMATION ON SH 4 REGARDING FLINTKOTE PLANT ENTRANCES.
11. CHAIN LINK FENCE EXISTS WITHIN RIGHT-OF-WAY OF FLINTKOTE DIVERSION SEWER. REMOVE AS REQUIRED FOR CONSTRUCTION. CONTRACTOR SHALL RESTORE ALL SECURITY FENCING REMOVED DURING CONSTRUCTION ALONG A LINE 5' WEST OF THE SEWER. CONTRACTOR SHALL MAINTAIN SECURITY BY TEMPORARY FENCING AT ALL TIMES DURING CONSTRUCTION PERIOD. 6' WOODEN WIRE FENCE ON WEST SIDE OF HIGHWAY TO BE REMOVED AS REQUIRED FOR CONSTRUCTION.
12. ALL FENCING MATERIALS TO BECOME PROPERTY OF JEFF. CO. DEPARTMENT OF WORKS & TRANSPORTATION. CONTRACTING OFFICER WILL ADVISE AS TO APPROPRIATE COUNTY OFFICIAL.

FLINTKOTE
BORROW AREA
SEE SHEET 76
20' W





CONTRACTOR MAY WORK UNDER THE OVERPASS
THE WIRING IF NEEDED AND WILL PROTECT THE
CONSTRUCTION.

WORKS) LOCATED ALONG THE DIVERSION SEWER
TO BECOME PROPERTY OF JEFFERSON COUNTY
TRANSPORTATION. SEE SHEET 22 FOR
WORKS.

SEE UNDERGROUND UTILITIES ALONG THE SEWER

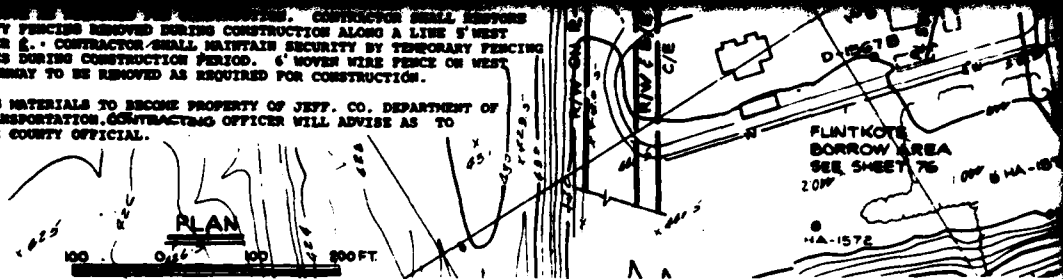
BY THE SURVEY CONTROL DATA, DRAINAGE
IN AREA HAS BEEN OMITTED. REFER TO THE

RAW & C/S LIMITS IN VICINITY OF STRUCTURES
MAY BE FOUND ON RESPECTIVE SITE PLANS.

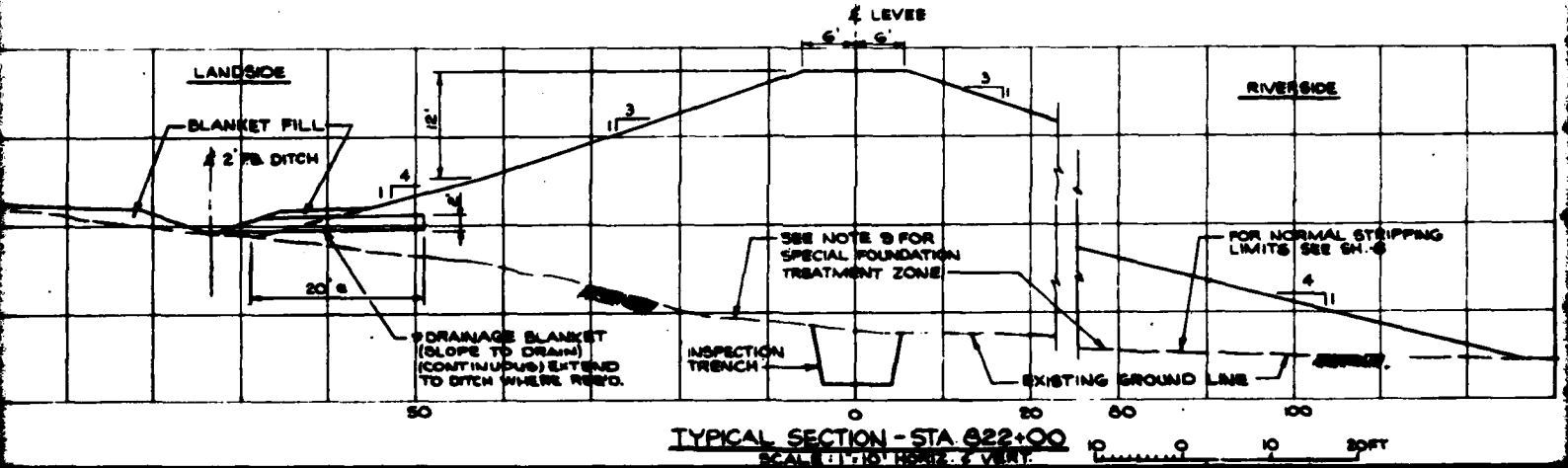
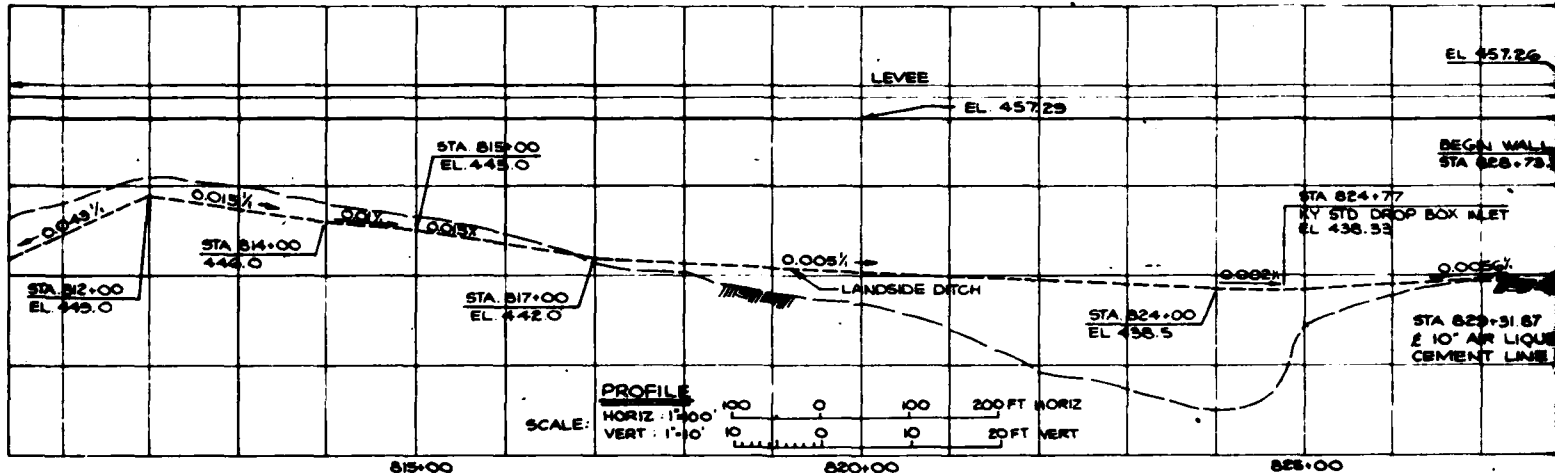
AND REFILL IS TO BE PERFORMED BETWEEN
P.S. 3-1 IN 78 FOR LHM TS AND THE
SERIAL AND INVOLVED TELEPHONE.

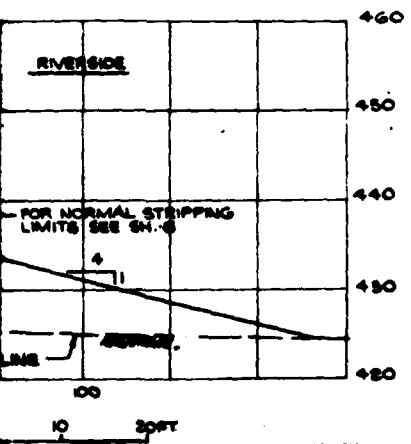
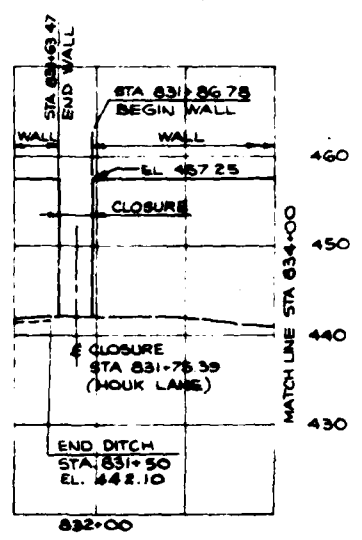
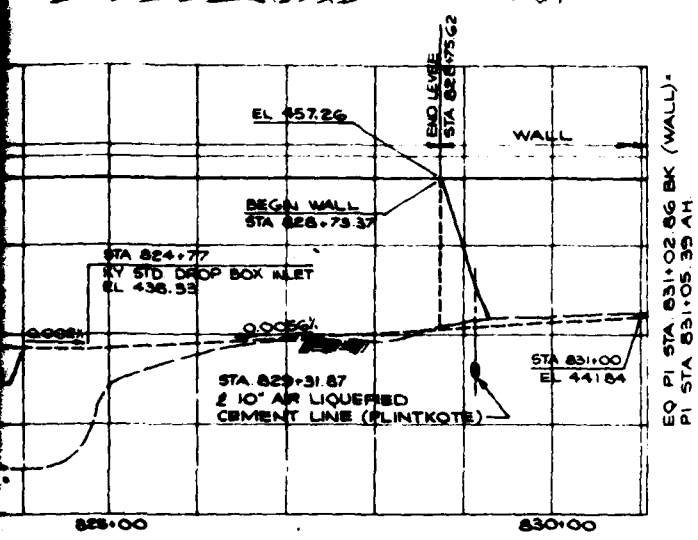
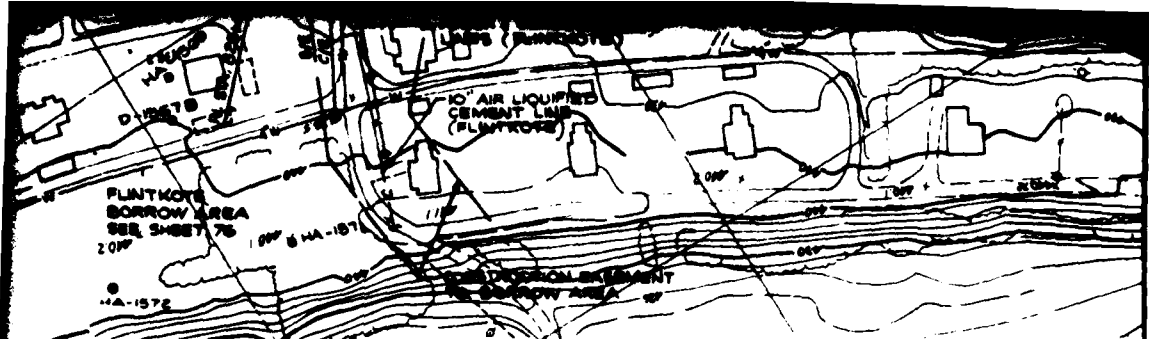
ALL SECURITY FENCING REMOVED DURING CONSTRUCTION. CONTRACTOR SHALL RESTORE
OF THE SEWER & CONTRACTOR SHALL MAINTAIN SECURITY BY TEMPORARY FENCING
AT ALL TIMES DURING CONSTRUCTION PERIOD. 6' WOVEN WIRE FENCE ON WEST
SIDE OF HIGHWAY TO BE REMOVED AS REQUIRED FOR CONSTRUCTION.

12. ALL FENCING MATERIALS TO BECOME PROPERTY OF JEFF. CO. DEPARTMENT OF
WORKS & TRANSPORTATION. CONTRACTING OFFICER WILL ADVISE AS TO
APPROPRIATE COUNTY OFFICIAL.



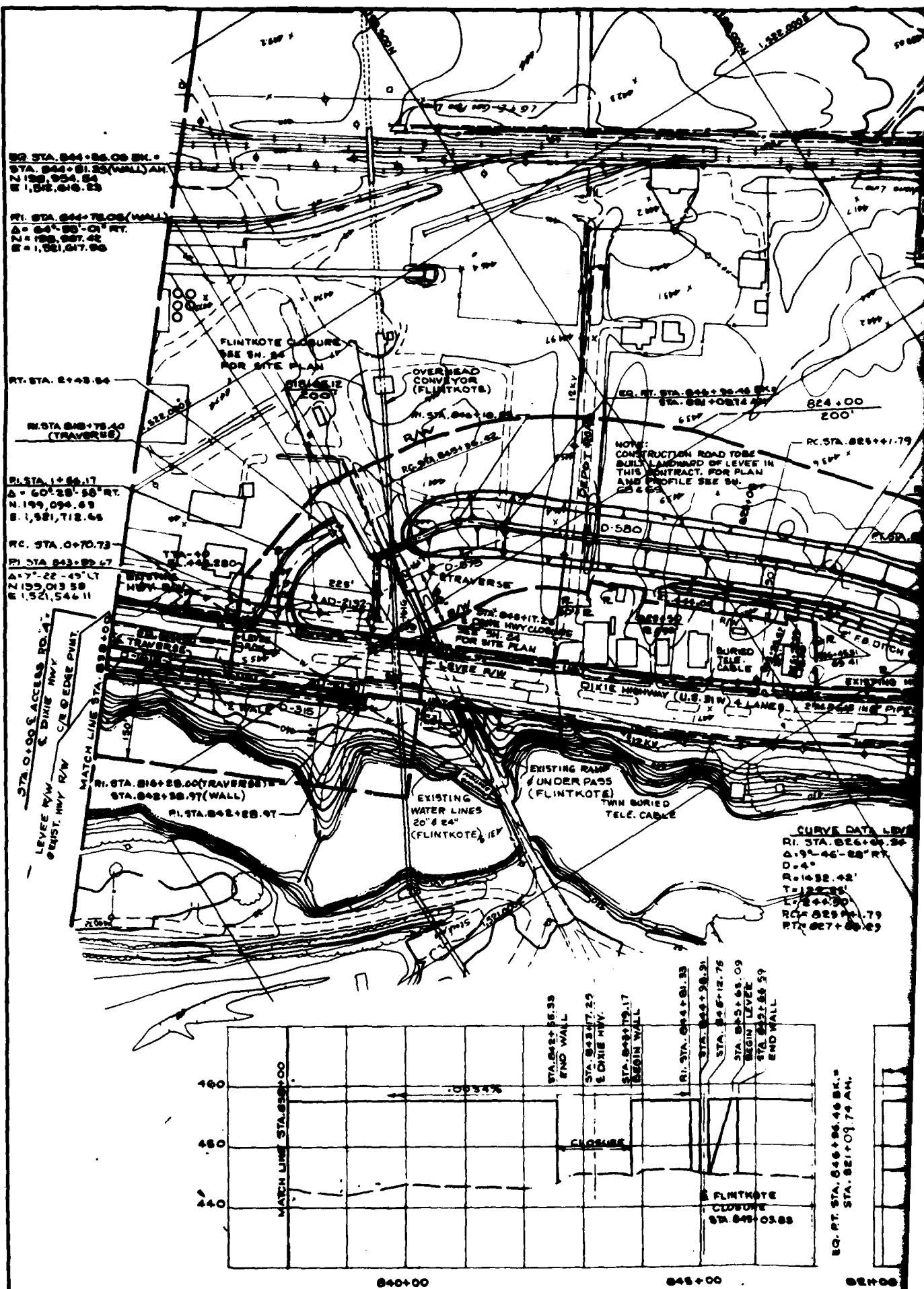
STA. 810+31.61 APL





REVISION	DATE	DESCRIPTION	BY	APP'D
U. S. ARMY ENGINEER DISTRICT, LOUISVILLE CORPS OF ENGINEERS LOUISVILLE, KENTUCKY				
DESIGNER: <i>Michel</i> CHECKER: <i>KLM</i> DATE: <i>M.A.R.</i>		SOUTHWESTERN JEFFERSON COUNTY, KY. LOCAL FLOOD PROTECTION SECTION - 4 PLAN, PROFILE & TYPICAL SECTION STA. 790+00 TO STA. 838+00		
DRAWN BY: <i>John A. Smith</i> DATE: AUG 82		DRAWING NUMBER 616-12.10 / 7		
PLATE 3				

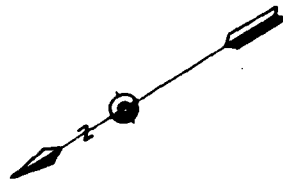
CORPS OF ENGINEERS



U. S. ARMY

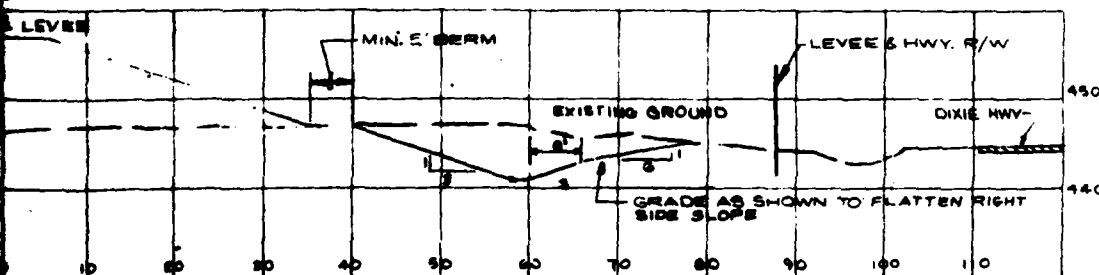
NOTES:

1. FOR MAP CLARITY, A MAJORITY OF THE SURVEY CONTROL DATA IN THE AREA OF THE DIXIE HWY. CLOSURE HAS BEEN OMITTED. REFER TO THE SITE PLAN ON SH. 24.
2. ALL RIGHT OF WAY OFFSETS REFERENCED TO E TRAVERSE.
3. APPROX. LOCATION OF EXISTING UTILITIES IS SHOWN. FOR MORE DETAILED INFORMATION, REFER TO REFERENCED SITE PLANS OR CONTACT THE UTILITY COMPANIES.
4. CONTRACTOR SHALL MAINTAIN CONSTRUCTION ROAD AND REGULATE TRAFFIC TO PERMIT SAFE ACCESS BY AREA RESIDENTS TO THEIR PROPERTY ON AND SOUTH OF DEPOT ROAD.
5. SEE INFORMATION ON SHEET 4 REGARDING FLINTKOTE PLANT ENTRANCES.
6. EXISTING ELECTRIC & TELEPHONE LINES CROSSING LEVEE TO BE RAISED IN PLACE TO CLEAR CONSTRUCTION (18' FOR TEL. & 24' FOR ELEC ABOVE LEVEE CROWN)
7. ABANDONED 8" GASLINE TO BE REMOVED AS REQUIRED BY CONTRACTOR.
8. 1/2" PRIVATELY OWNED GAS SERVICE LINE TO BE RELOCATED OVER LEVEE BY CONTRACTOR IN COORDINATION WITH OWNER.



CURVE DATA TRAVERSE

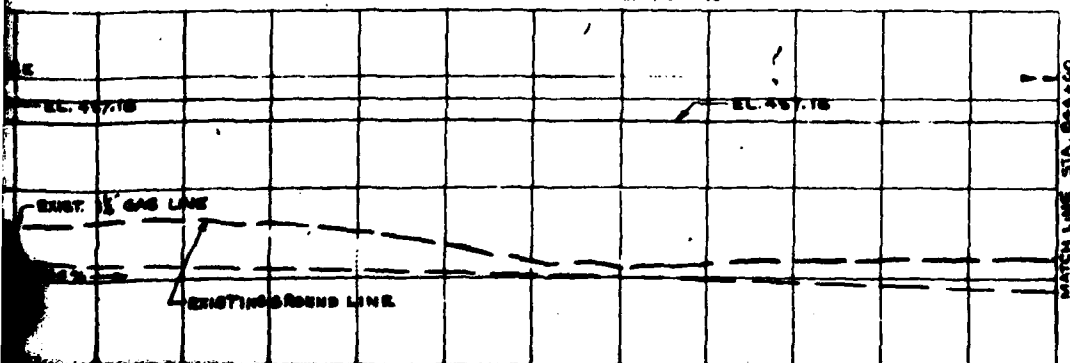
P.I. STA. 831+24.72
 $\Delta = 28^{\circ}-57'-59''$ LT.
 $D = 10^{\circ}$
 $R = 972.96'$
 $T = 152.09'$
 $L = 259.65'$
 $MC = 829+92.65$
 $PT = 832+52.28$

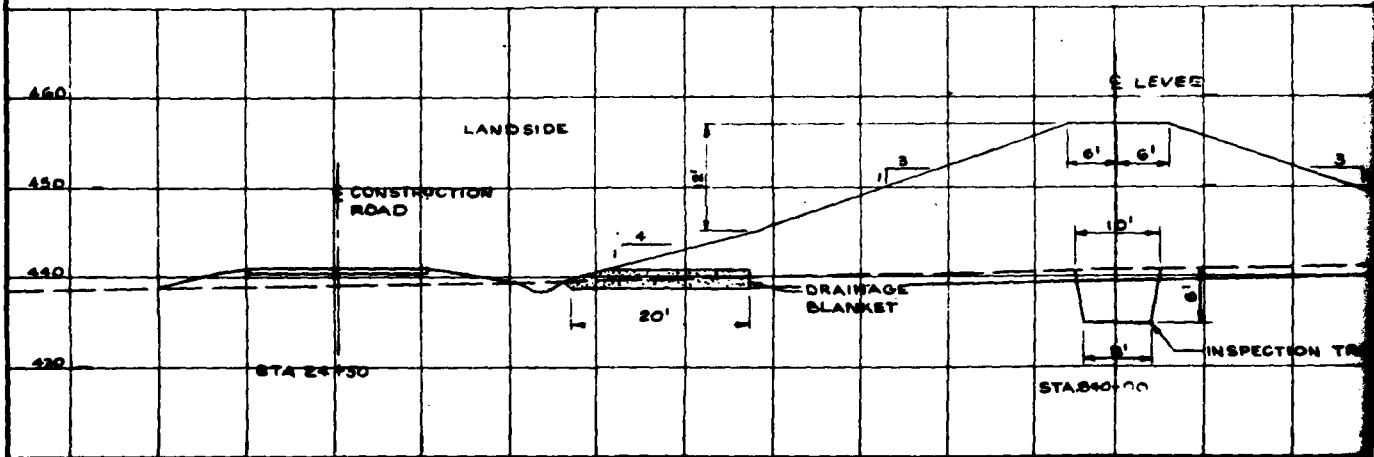
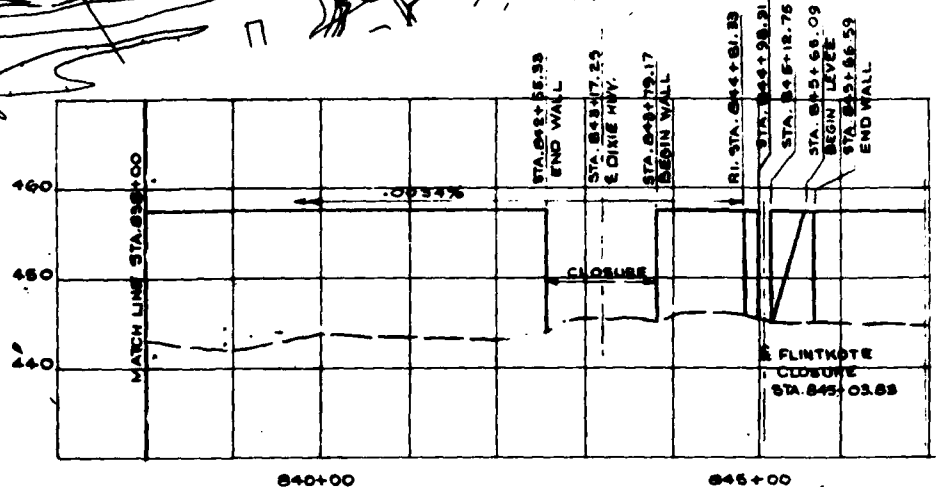
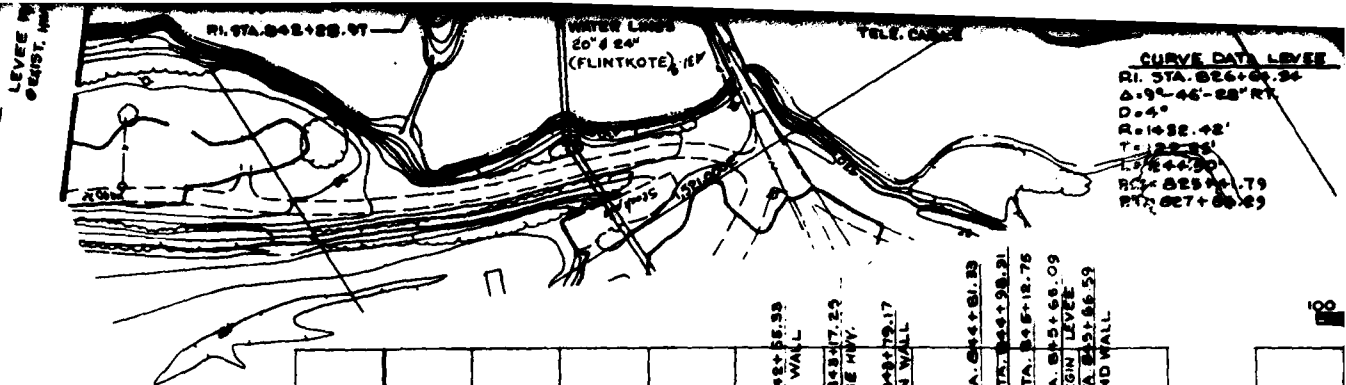


SPECIAL GRADING AND DITCH TREATMENT

STA. 832+00 TO 835+30

SCALE: HOR. 1" = 10' 10' 0' 10' 20 FT.
 VERT. 1" = 10'





4

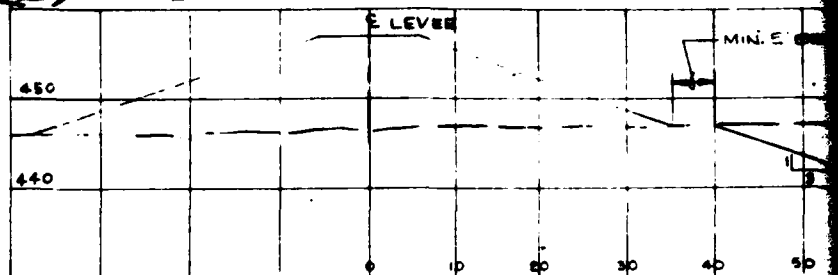
CURVE DATA LEVEE
 RI STA. 826+04.94
 Δ = 94° 46' 28" RT.
 D = 4°
 R = 1432.43'
 T = 122.90'
 L = 245.80'
 RC = 825+01.79
 RT = 827+08.83

RI STA. 831+84.78
 (TRAVERSE)
 Δ = 25° 57' 55" LT.
 N = 198,028.00
 E = 1,520,042.00
 RI STA. 830+79.04
 Δ = 25° 57' 55" LT.
 N = 198,027.73
 E = 1,520,076.68

RT STA. 832+52.45
 TRAVERSE
 1,520,500E
CURVE DATA LEVEE
 RI STA. 830+79.04
 Δ = 25° 57' 55" LT.
 D = 10°
 R = 578.96'
 T = 132.09'
 L = 269.63
 RC = 829+46.96
 RT = 832+06.60

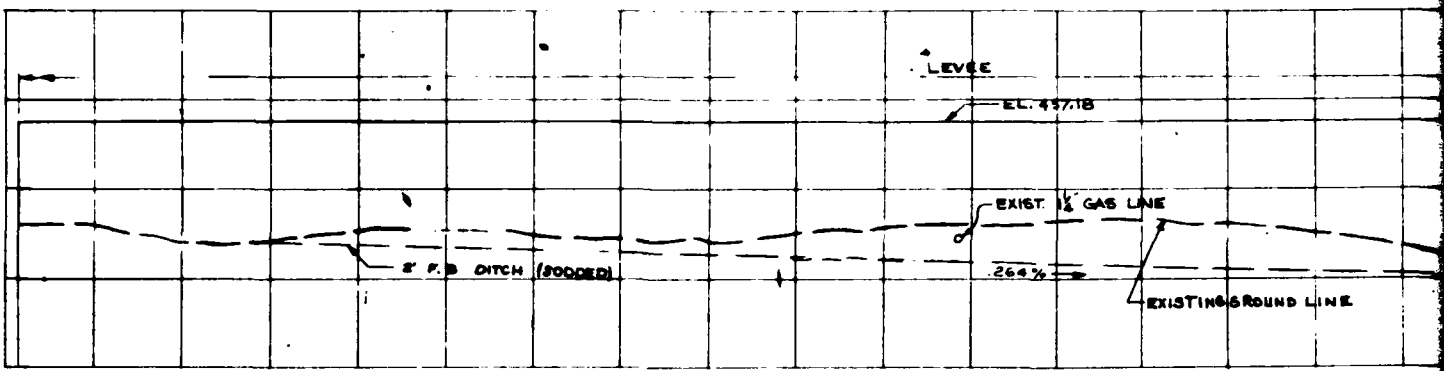
PLAN

100 0 100 200 FEET



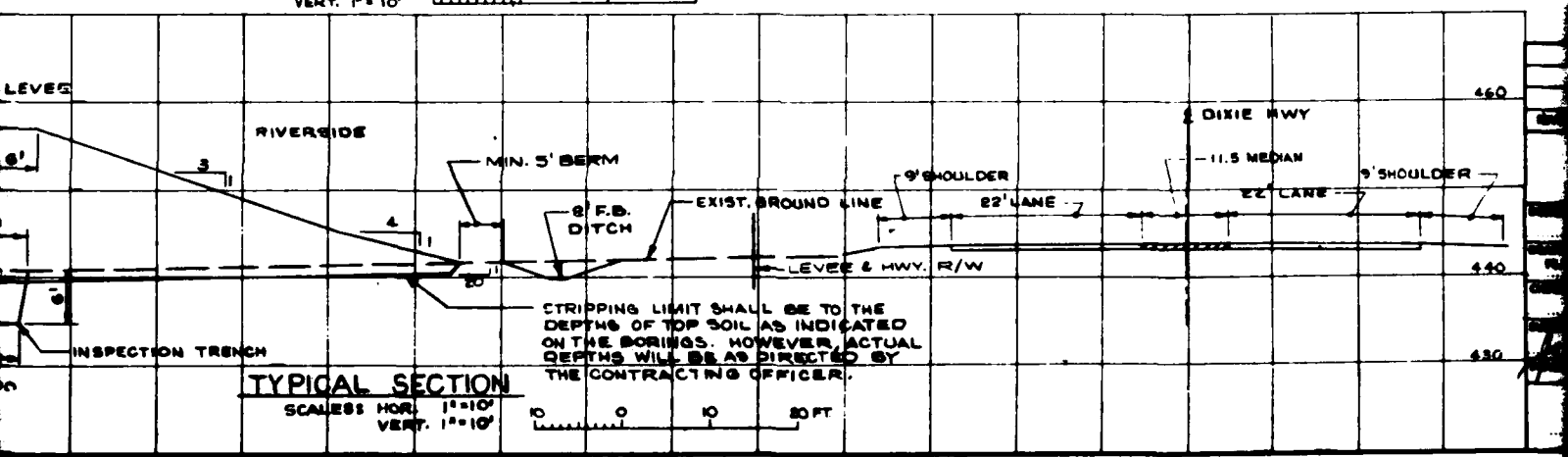
SPECIAL GRADING AND DITCH TR
STA. 832+00 TO 835+30

EQ. RT. STA. 846+06.46 BK. =
 STA. 821+09.74 AH.

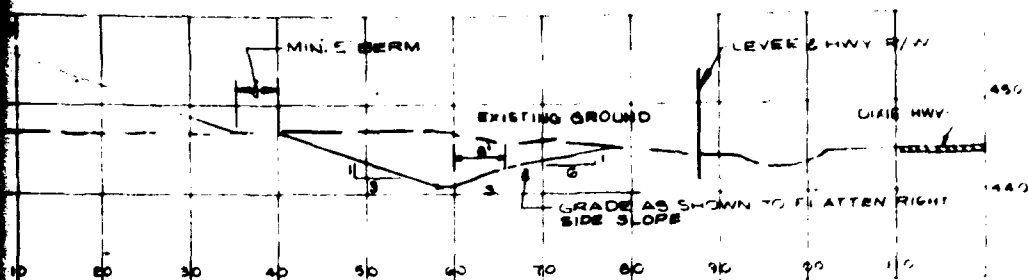


PROFILE

SCALE: HOR. 1"=10' VERT. 1"=10' 10 0 10 20 FT



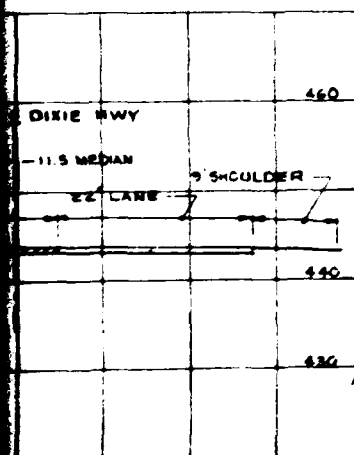
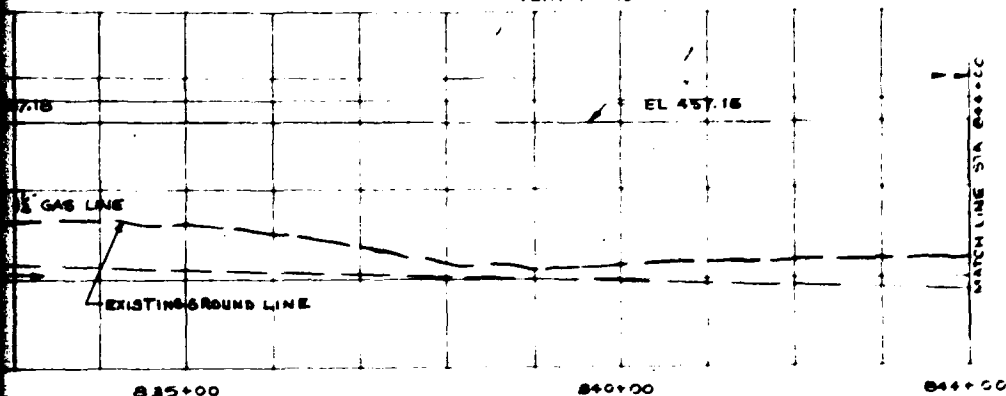
5 11



AL GRADING AND DITCH TREATMENT

STA. 832+00 TO 835+30

SCALE: HOR. 1" = 10' VERT 1" = 10'

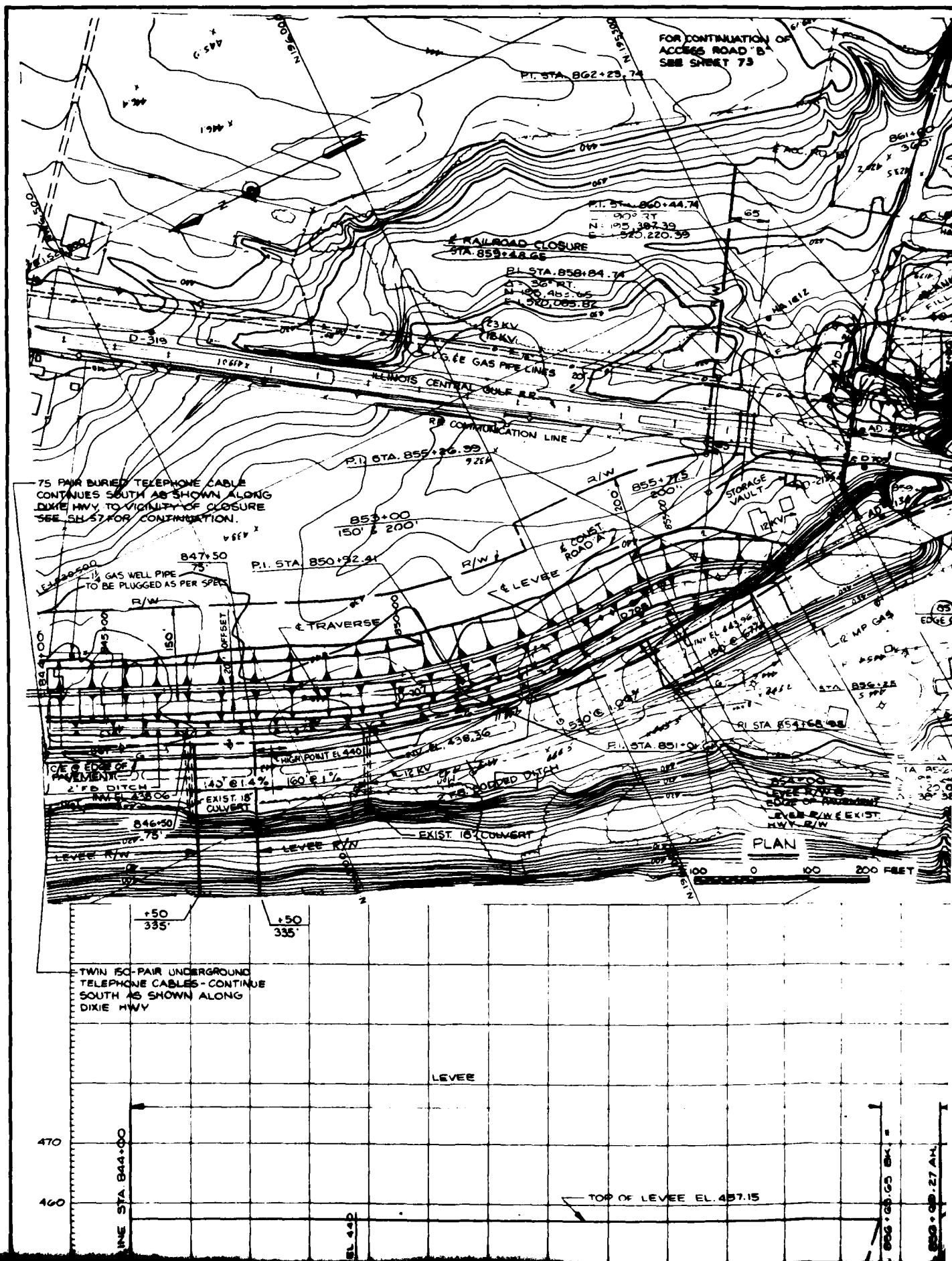


DESIGN		DATE		REVISION		BY	APP'D
U. S. ARMY ENGINEER DISTRICT, LOUISVILLE							
CORPS OF ENGINEERS							
LOUISVILLE, KENTUCKY							
DESIGNER		SOUTHWESTERN JEFFERSON COUNTY, KY.					
CHECKER		LOCAL FLOOD PROTECTION					
R.P.M.		SECTION - 4					
MAR.		PLAN, PROFILE & TYPICAL SECTION					
DATE		STA. 832+00 TO STA. 844+00					
BY		DATE AUG. 82					
DRAWN		DRAWING NUMBER					
616-12 10/8		616-12 10/8					

PLATE 4

616-12 10/8

CORPS OF ENGINEERS

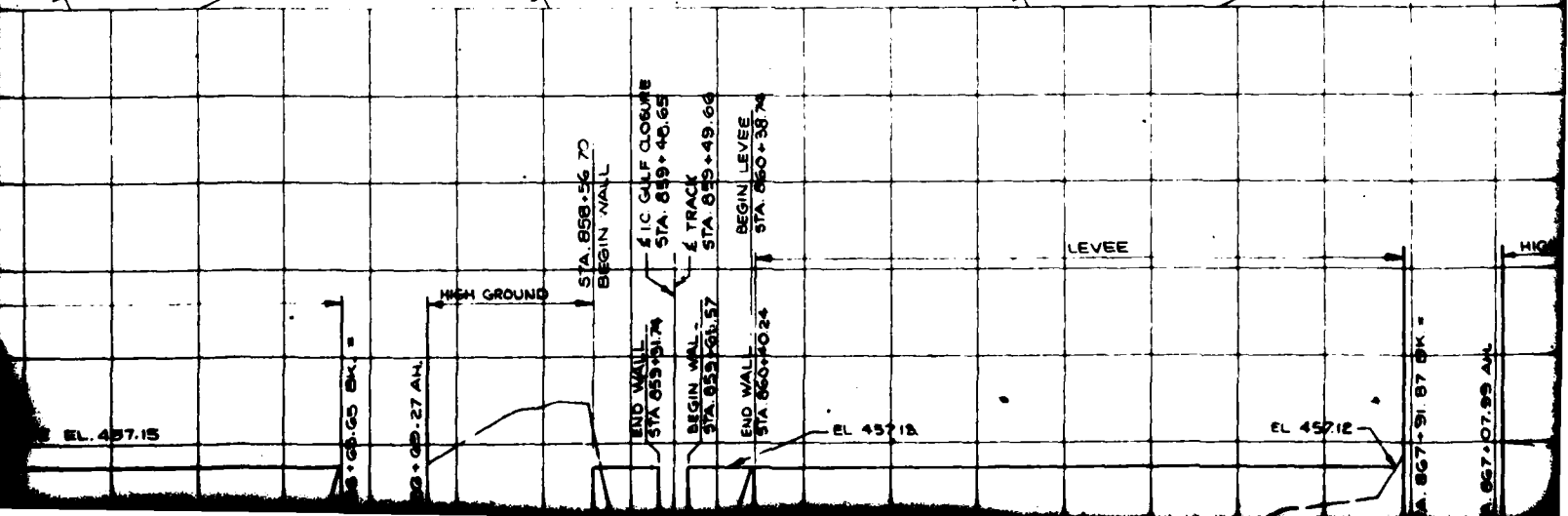


FOR CONTINUATION OF
ACCESS ROAD 'B'
SEE SHEET 73

LEVEE CURVE DATA
PI: STA 850+92.40
A: 25° 42' 14" LT
D: 5°
R: 1145.92'
T: 263.19'
L: 517.41'
PC: 848+29.22
PT: 853+46.63
N: 196,206.27
E: 152,076.18

TRAVERSE
PI: STA 851+01.61
A: 25° 52' 14" LT
D: 5°
R: 1145.91'
T: 263.19'
L: 517.41'
PC: 848+38.42
PT: 853+55.83
N: 196,210.00
E: 152,054.00

LEVEE R/W
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LEVEE

CURVE DATA

PI: STA 850+92.4
 $\Delta: 25^{\circ}42'14''$ LT
 $D: 5^{\circ}$
 $R: 1145.32'$
 $T: 263.19'$
 $L: 517.41'$
 $PC: 848+23.22$
 $PT: 853+46.63$
 $N: 196,206.27$
 $E: 152,074.18$

PI: STA 855+26.3

$\Delta: 35^{\circ}RT$
 $D: 15^{\circ}$
 $R: 381.97'$
 $T: 120.44'$
 $L: 233.33'$
 $PC: 854+05.98$
 $PT: 856+33.29$
 $N: 195,763.72$
 $E: 152,093.01$

PI: STA 862+2.74

$\Delta: 10^{\circ}LT$
 $D: 15^{\circ}$
 $R: 381.97'$
 $T: 63.32'$
 $L: 185.67'$
 $PC: 861+59.82$
 $PT: 862+86.49$
 $N: 195,246.63$
 $E: 152,013.89$

PI: STA 864+28.32

$\Delta: 11^{\circ}R$
 $D: 10^{\circ}$
 $R: 572.96'$
 $T: 55.17'$
 $L: 110.00'$
 $PC: 863+73.15$
 $PT: 864+83.15$
 $N: 195,046.67$
 $E: 152,075.44$

PI: STA 867+06.73

$\Delta: 32^{\circ}RT$
 $D: 30^{\circ}$
 $R: 190.99'$
 $T: 106.67'$
 $L: 106.67'$
 $PC: 866+51.97$
 $PT: 867+29.64$
 $N: 194,793.26$
 $E: 151,959.31$

TRAVERSE

CURVE DATA

PI: STA 851+01.61
 $\Delta: 25^{\circ}52'14''$ LT
 $D: 5^{\circ}$
 $R: 1145.31'$
 $T: 263.19'$
 $L: 517.41'$
 $PC: 848+38.42$
 $PT: 853+55.83$
 $N: 196,210.00$
 $E: 152,054.00$

PI: STA 854+68.98

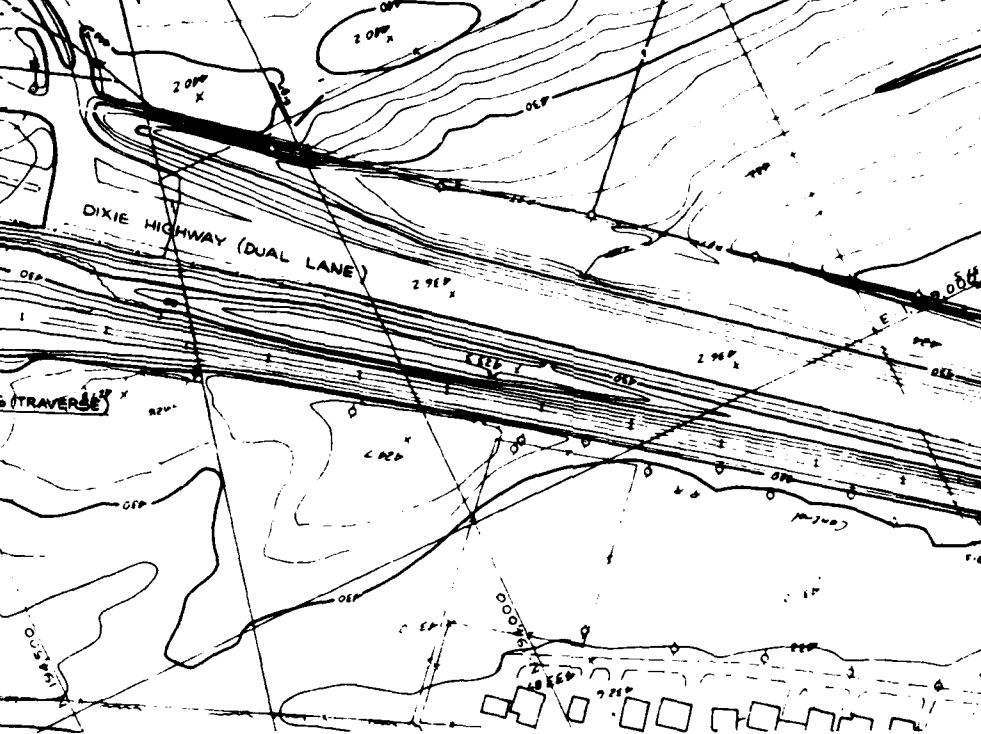
$\Delta: 18^{\circ}32'17''$ LT
 $D: 9^{\circ}59'58''$
 $R: 572.98'$
 $T: 93.51'$
 $L: 185.23'$
 $PC: 853+75.47$
 $PT: 855+60.76$
 $N: 195,834.00$
 $E: 152,070.00$

PI: STA 862+12.59

$\Delta: 48^{\circ}41'52''$ RT
 $D: 20^{\circ}$
 $R: 286.48'$
 $T: 129.64'$
 $L: 243.48'$
 $PC: 860+82.95$
 $PT: 863+26.37$
 $N: 195,165.00$
 $E: 152,017.00$

PI: STA 864+57.60

$\Delta: 19^{\circ}03'53''$ LT
 $D: 20^{\circ}$
 $R: 286.48'$
 $T: 47.98'$
 $L: 95.08'$
 $PC: 864+09.09$
 $PT: 865+04.18$
 $N: 194,977.00$
 $E: 151,997.00$



NOTES:

1. SEE SHEETS 57 AND 58 FOR SITE DEVELOPMENT AT IC+GULF R.R. CLOSURE AND ADJOINING LEVEE.
2. ALL R/W & C/E OFFSETS REFERENCED TO E TRAVERSE
3. CONSTRUCTION WORKING LIMITS AND R/W FROM HWY. 44 CONSTRUCTION ARE NOT INDICATED.
4. ELECTRIC POWER & TELEPHONE LINES TO BE RELOCATED BY OWNERS.

EL 457.12

867+31.87 ST. =

867+07.39 AN

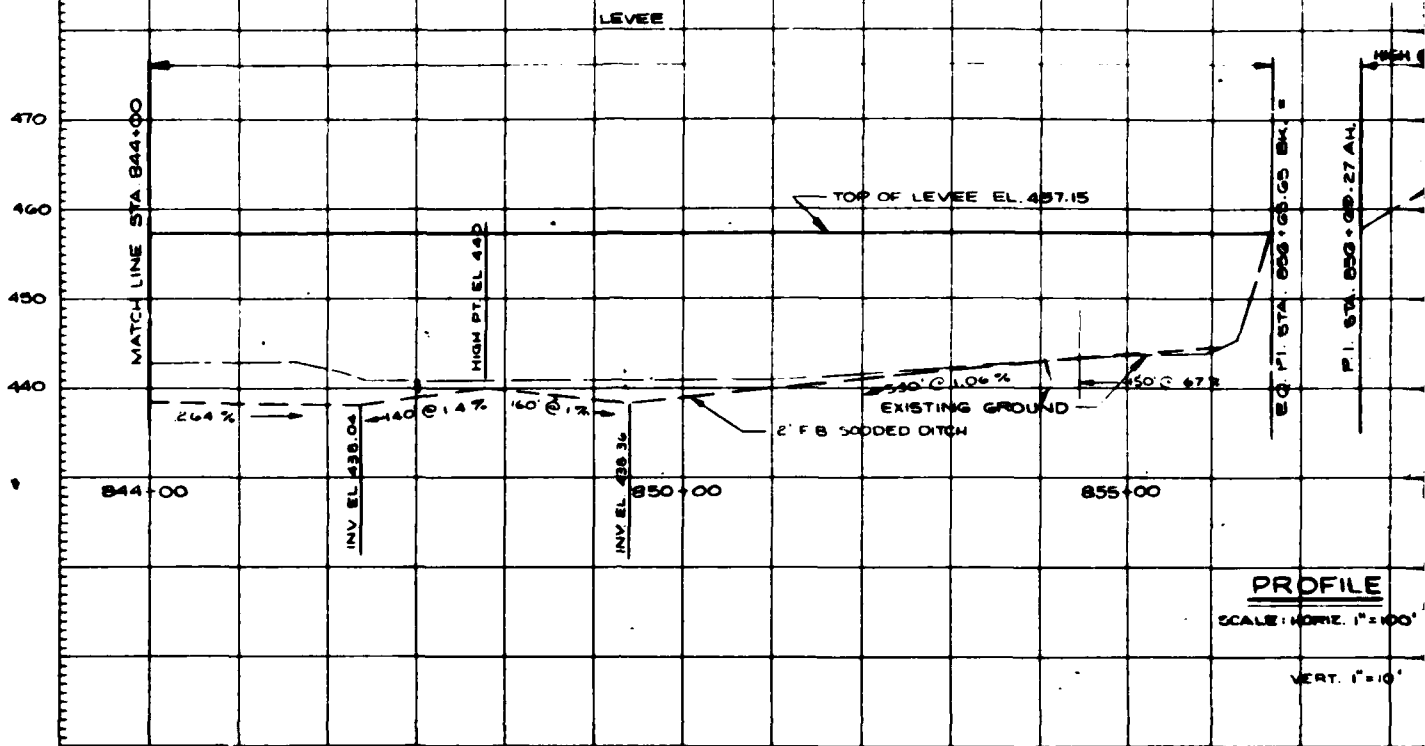
HIGH GROUND

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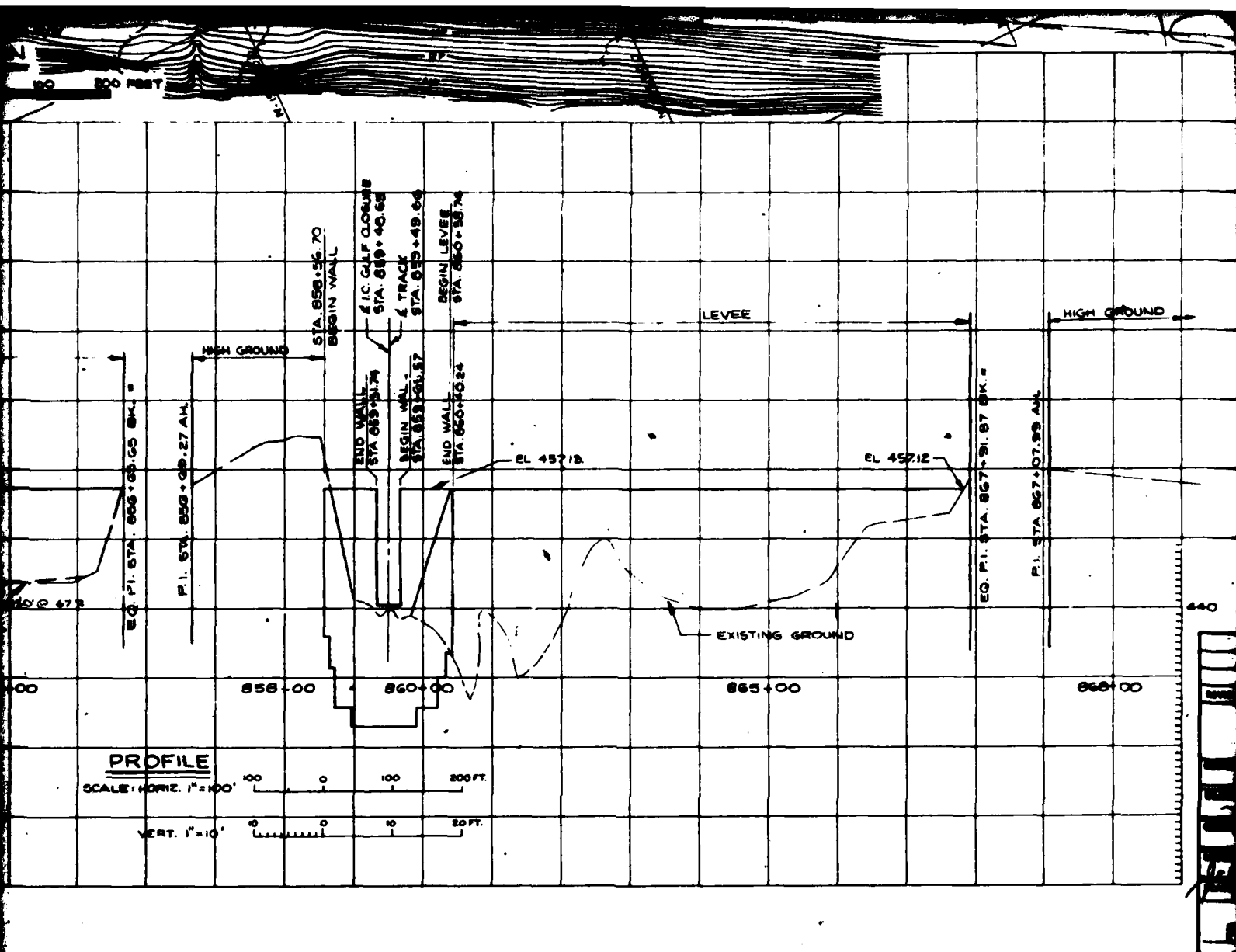
•50
335
TWIN 50-PAIR UNDERGROUND
TELEPHONE CABLES - CONTINUE
SOUTH AS SHOWN ALONG
DIXIE HWY



PROFILE

SCALE: HORIZ. 1" = 100'

VERT. 1" = 10'



NOTES:

- 1 SEE SHEETS 57 AND 58 FOR SITE DEVELOPMENT AT I.C. GOLF R.R. CLOSURE AND ADJOINING LEVEE
- 2 ALL R/W & C/E OFFSETS REFERENCED TO E TRAVERSE
- 3 CONSTRUCTION WORKING LIMITS AND R/W FOR HWY. 44 CONSTRUCTION ARE NOT INDICATED
- 4 ELECTRIC POWER & TELEPHONE LINES TO BE RELOCATED BY OWNERS.

HIGH GROUND

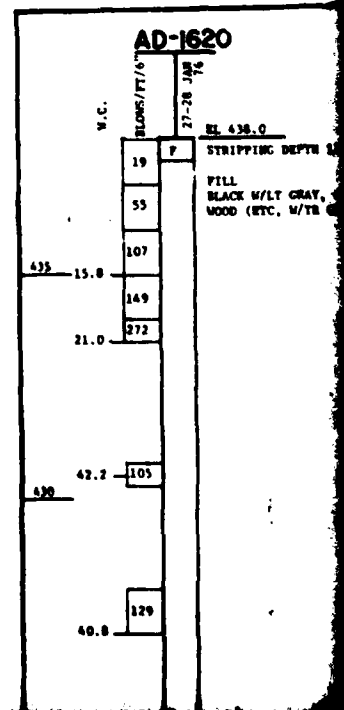
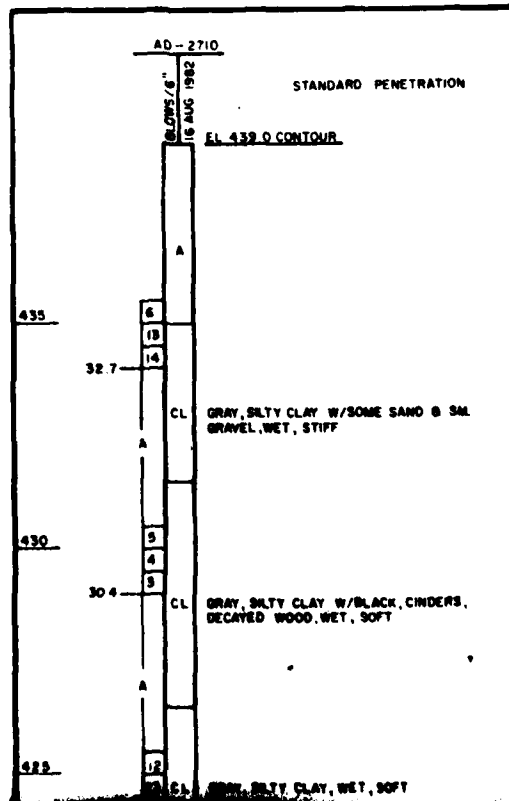
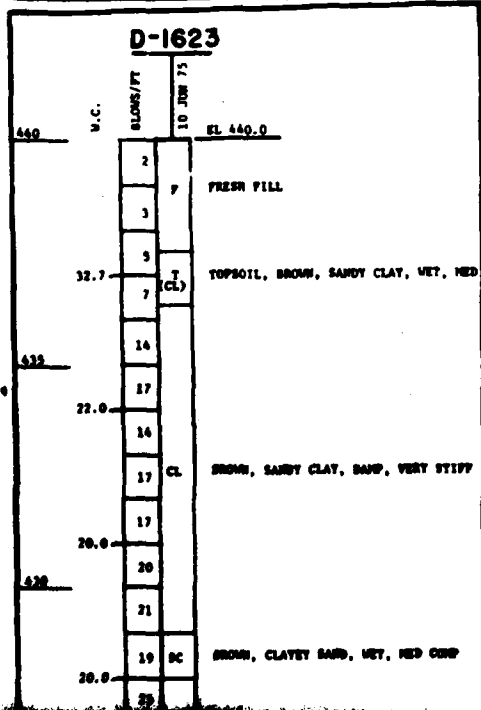
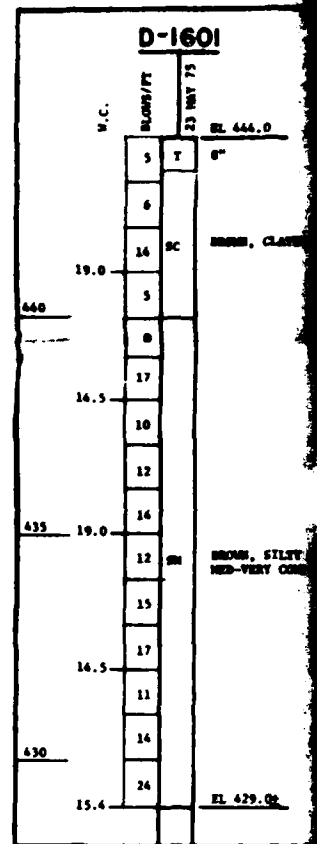
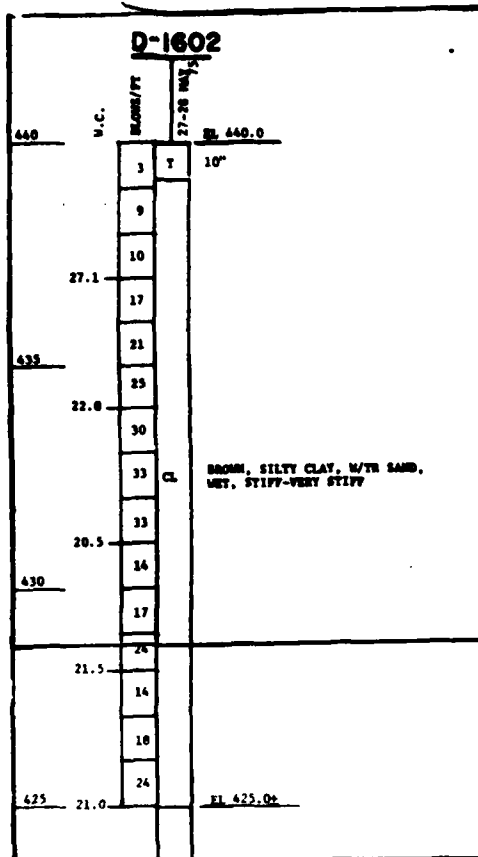
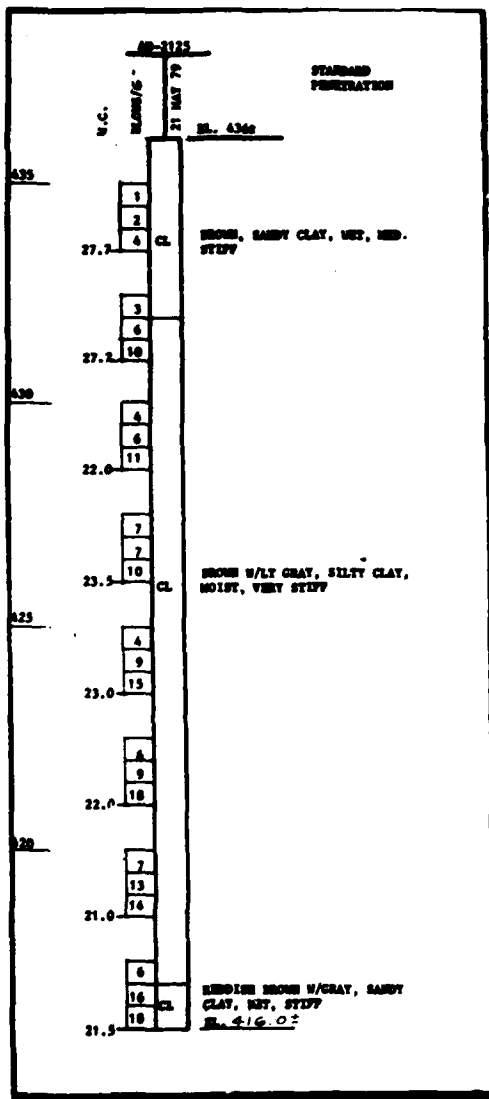
EL 452.12

EQ. P.I. STA. 867+91.87 B.K. =

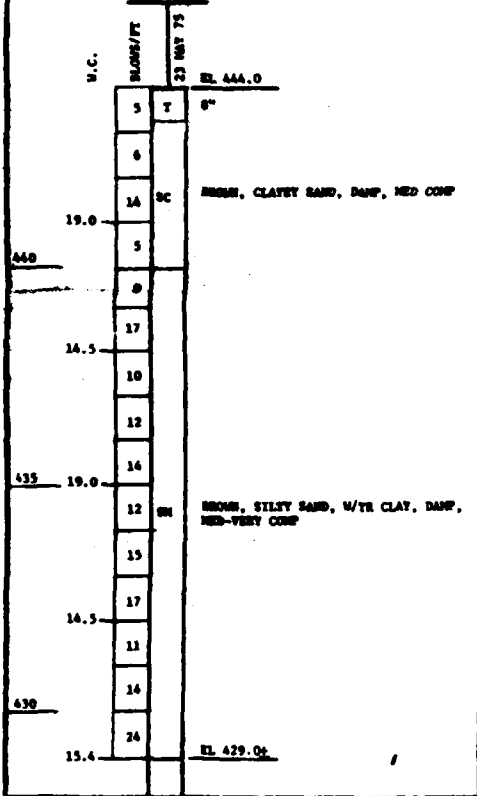
P.I. STA. 867+07.99 A.M.

868+00

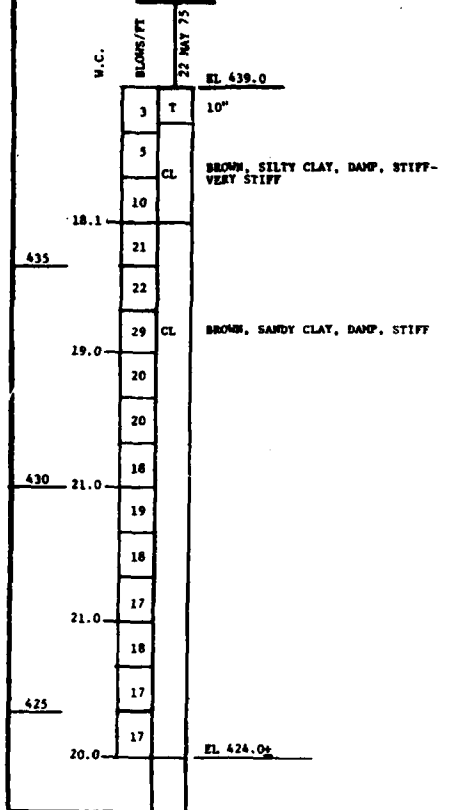
REVISION	DATE	DESCRIPTION	BY
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<p>DESIGNED: <i>med</i></p>		<p align="center">SOUTHWESTERN JEFFERSON COUNTY, KY. LOCAL FLOOD PROTECTION SECTION-4</p>	
<p>DRAWN: <i>~</i></p>	<p>TRACED: <i>C.E.R.</i></p>	<p align="center">PLAN & PROFILE</p>	
<p>CHECKED: <i>MAR</i></p>		<p align="center">STA. 844+00 TO STA. 867+91.87</p>	
<p>APPROVED: <i>Det. J. Smith</i></p>		<p>DATE: AUG 62</p>	
<p>SCALE: AS SHOWN</p>		<p>DRAWING NUMBER</p>	
<p align="center">PLATE 5</p>		<p align="center">616-12.10/9</p>	



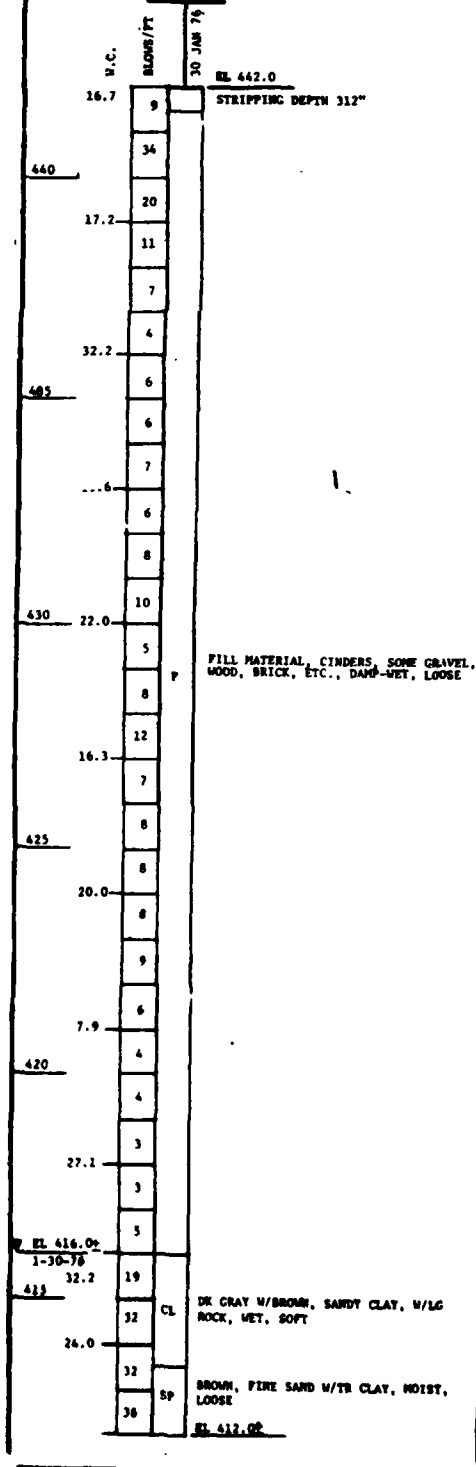
D-1601



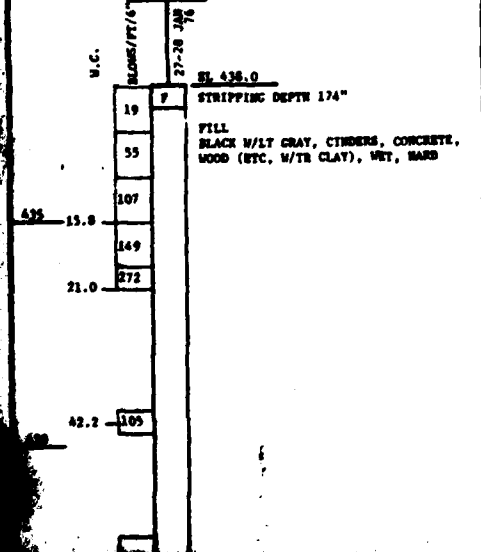
D-1600



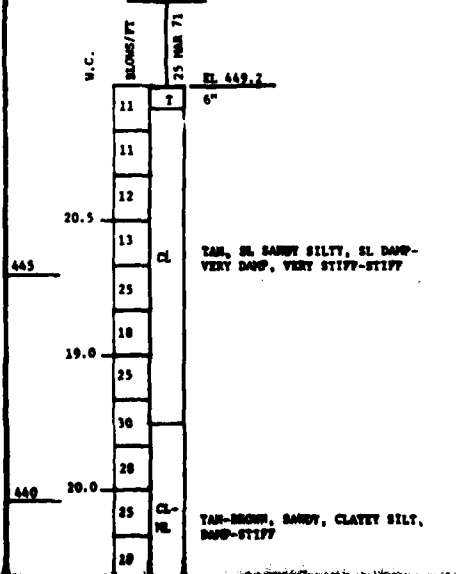
D-1620A



AD-1620



D-703



Symbol

2

1

D-1620A

EL 439.0

10"

BROWN, SILTY CLAY, DAMP, STIFF-
VERY STIFF

BROWN, SANDY CLAY, DAMP, STIFF

EL 424.0

449.2

SL. SANDY SILTY, SL DAMP-
VERY DAMP, VERY STIFF-9T177

W.C.	BLOWS/FT	30 JAN 79	EL 442.0
16.7	9		STRIPPING DEPTH 312"
	34		
	20		
17.2	11		
	7		
	4		
32.2	6		
	6		
	7		
...	6		
	8		
	10		
430	5		FILL MATERIAL, CINDERS, SOME GRAVEL, WOOD, BRICK, ETC., DAMP-WET, LOOSE
	8		
	12		
16.3	7		
	8		
	8		
20.0	9		
	6		
7.9	4		
	4		
	3		
27.1	3		
	5		
EL 416.0	19		
1-30-78	32	CL	DK GRAY W/BROWN, SANDY CLAY, W/LG ROCK, WET, SOFT
413	32		
	32	SP	BROWN, FINE SAND W/TR CLAY, MOIST, LOOSE
24.0	36		EL 412.00

D-704

W.C.

BLOWS/FT

29 MAR 71

EL 426.1

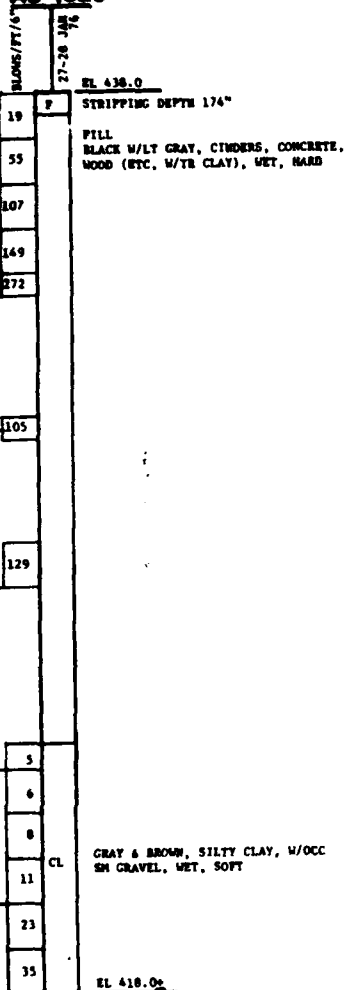
6"

425

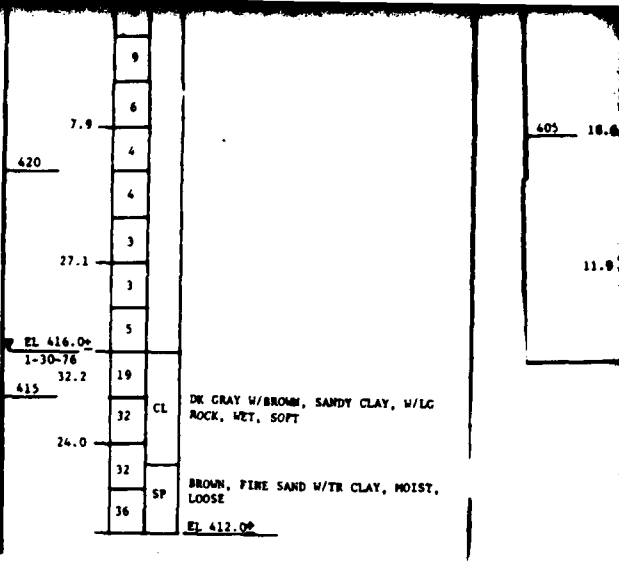
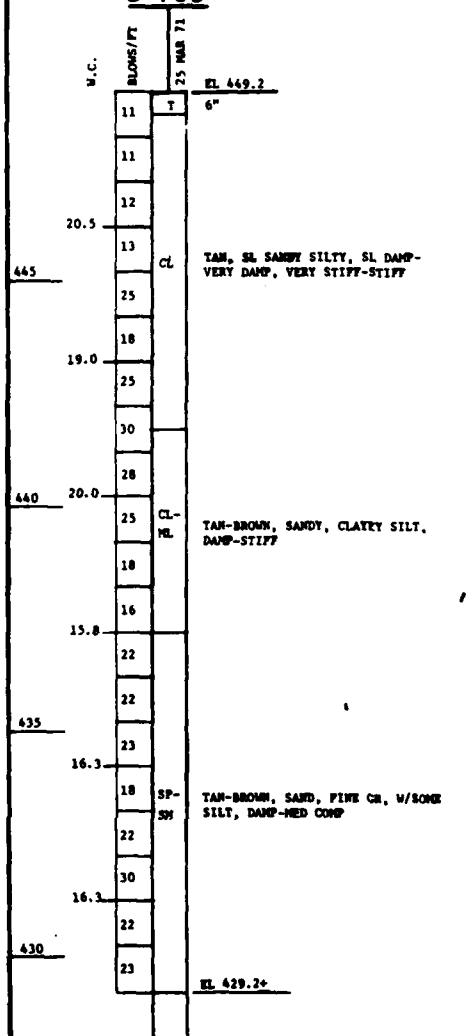
4 T | | || | 5 | CL | BLACKISH GRAY, SL ORGANIC, SANDY SILTY CLAY, DAMP, MED |
	7		
35.1	8		
	8	CL	MOTTLED GRAYISH TAN, SANDY SILTY CLAY W/TR IRONOXIDE, SL WET, MED
	8		
420	12		
25.5	18	CL	GRAY TAN, SILTY SANDY CLAY, VERY DAMP, STIFF
	21		
23.5	26		
EL 416.1	20	CL-SC	REDDISH TAN, SILTY CLAY & SAND W/TR IRONOXIDE, DAMP-MOIST, MED-COMP
3-29-71	28		
415	35		
	28	CL	DK TAN BROWN, SILTY SANDY CLAY W/TR IRONOXIDE PELLETS, DAMP, STIFF
21.0	30		
	25		
23.0	52	CL-ML	TAN BROWN, SANDY CLAYEY SILT, WET, SOFT
	55		
29.9	45	SP	BROWN STRATIFIED SAND & CLAYEY SILT, WET, MED-MED COMP
	40	CL-ML	
	25		
405	55		
18.6	60		
	45	SP-SH	BROWN STRATIFIED SAND & SILTY SAND, DAMP, COMP
11.9	40		EL 401.14

Revisions			
Symbol	Description	Date	Approved

AD-1620



D-703



Symbol

Designed by:

Drawn by:

Checked by:

Reviewed by:

Approved by:



US Army Corps
of Engineers
SOUTH
LOCAL
SECT
BORI

Scale:

Date:

Drawing
Code:

3

2

[illegible]

Revisions			
Symbol	Descriptions	Date	Approved


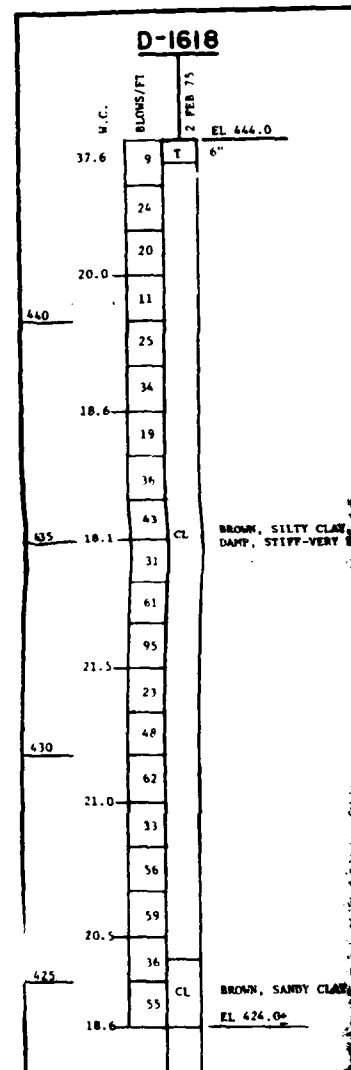
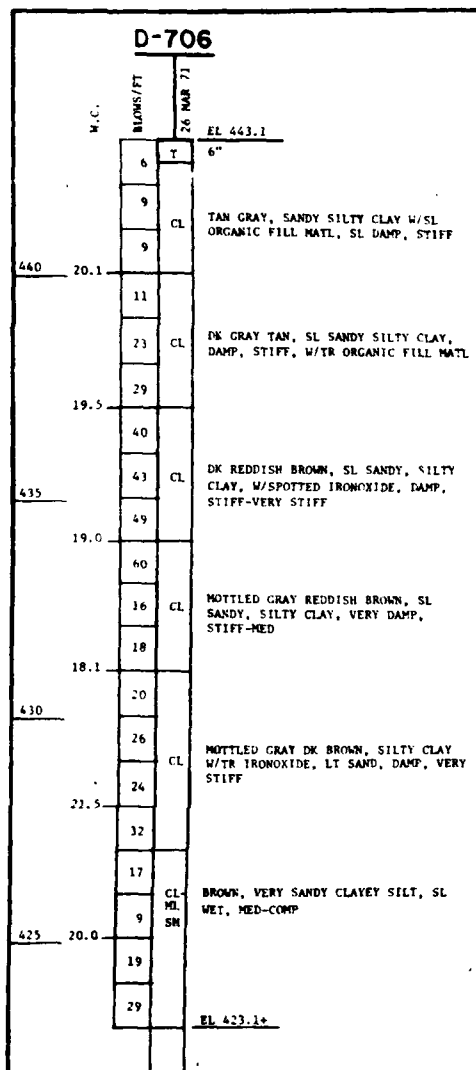
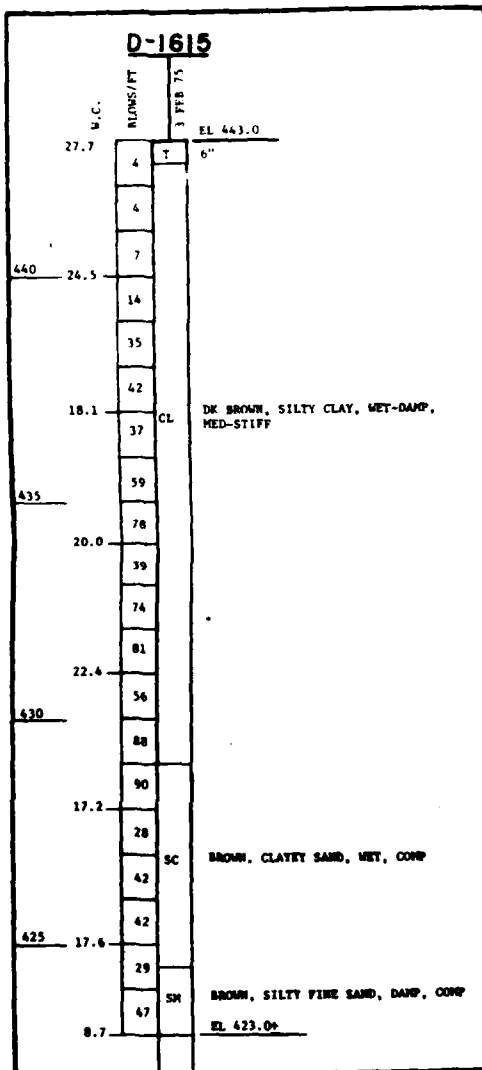
Designed by: Drawn by: Checked by: Reviewed by: Approved by:	 US Army Corps of Engineers SOUTHWEST JEFFERSON COUNTY, KY. LOCAL FLOOD PROTECTION SECTION 4 BORING LOGS Scale: Date: Drawing Code:	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS LOUISVILLE KENTUCKY Sheet reference number: Sheet _ _ of _
------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------

PLATE 6

2

1



D-1618

BLOWS/FT	W.C.	30 IN. 73	EL. 444.0
9	T	6"	
24			
20			
11			
25			
34			
19			
36			
43	CL		BROWN, SILTY CLAY, W/FINE SAND, DAMP, STIFF-VERY STIFF
31			
61			
95			
23			
48			
62			
33			
56			
59			
36			
55	CL		BROWN, SANDY CLAY, DAMP, VERY STIFF EL. 424.0+

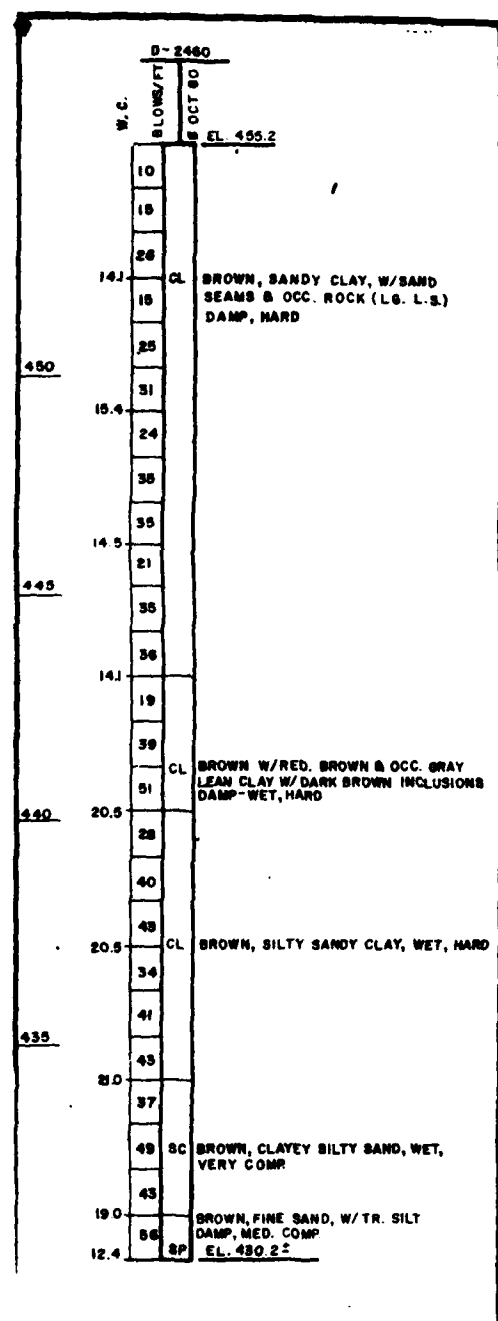
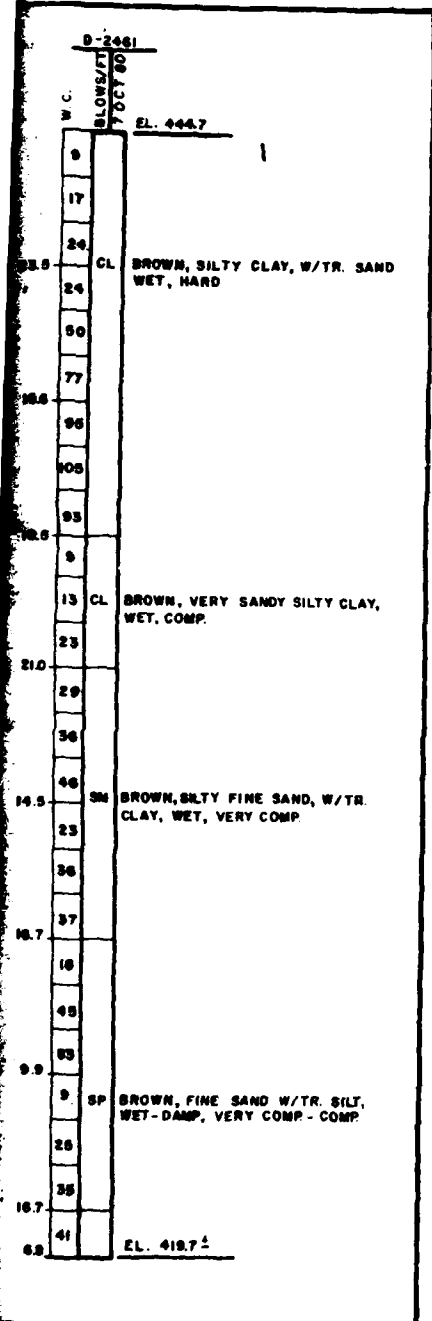
D-708

BLOWS/FT	W.C.	30 IN. 73	USED 2 1/2" x 5' SAMPLER	EL. 444.1
7	T	12"		
8				
21				
20.0				
41				
49	CL		REDDISH BROWN & GRAY, MOTTLED, CLAY, SL SILTY, SL DAMP, FIRM	
61				
19.5				
13				
24				
22				
21.2				
19	CL		BROWN, LEAN CLAY W/TR SAND, SL DAMP, FIRM	
24				
29				
21.2				
35				
36	CL		BROWN, SANDY SILTY CLAY, SL DAMP, HARD	
38				
21.5				
33				
34				
35				
15.8				
38	SP		BROWN, FINE SILTY SAND W/TR CLAY, DAMP, HARD	
40				EL. 424.1+

D-2461

BLOWS/FT	W.C.	30 IN. 73	EL. 444.7
9			
17			
24			
23.5	CL		BROWN, SILTY CLAY, W/TR SAND WET, HARD
24			
60			
77			
10.6			
98			
105			
93			
10.5			
9			
13	CL		BROWN, VERY SANDY SILTY CLAY, WET, COMP.
23			
21.0			
29			
36			
48	SM		BROWN, SILTY FINE SAND, W/TR CLAY, WET, VERY COMP
14.5			
23			
36			
37			
16.7			
18			
48			
9.8			
9	SP		BROWN, FINE SAND W/TR SILT, WET-DAMP, VERY COMP - COMP
28			
38			
16.7			
41			EL. 418.7

U. S. ARMY



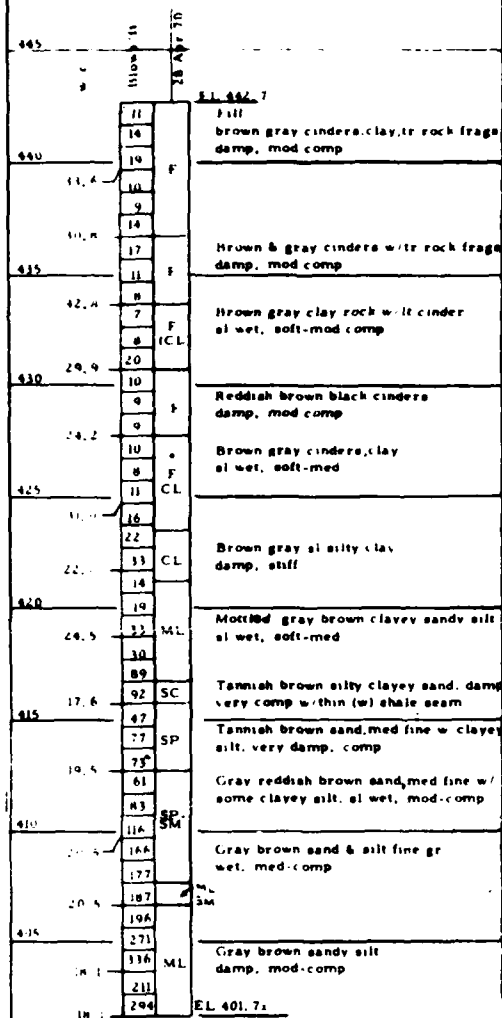
35		
38	SP	BROWN, FINE SILTY SAND W/TR CLAY, DAMP, HARD
40		EL. 424.12

16.7	37	
	18	
425	49	
9.9	83	
	9	SP BROWN, FINE SAND W/TR SILT, WET-DAMP, VERY COMP - COMP
	28	
18.7	35	
420	41	EL. 418.72

40		
48		
20.8	CL	BROWN, SILTY SANDY CLAY, WET, HARD
34		
41		
45		
50		
57		
49	SC	BROWN, CLAYEY SILTY SAND, WET, VERY COMP
43		
19.0		
56		BROWN, FINE SAND, W/TR SILT DAMP, MED. COMP
12.4	SP	EL. 430.22

REVISION	DATE	DESCRIPTION	BY	APP'D
U. S. ARMY ENGINEER DISTRICT, LOUISVILLE CORPS OF ENGINEERS LOUISVILLE, KENTUCKY				
DESIGNED:		SOUTHWEST JEFFERSON COUNTY, KY. LOCAL FLOOD PROTECTION SECTION 4 BORING LOGS		
DRAWN:				
CHECKED:				
SUBMITTED:				
SCALE:		DATE:		
		DRAWING NUMBER		
		PLATE 8		

D-503



A - 2706

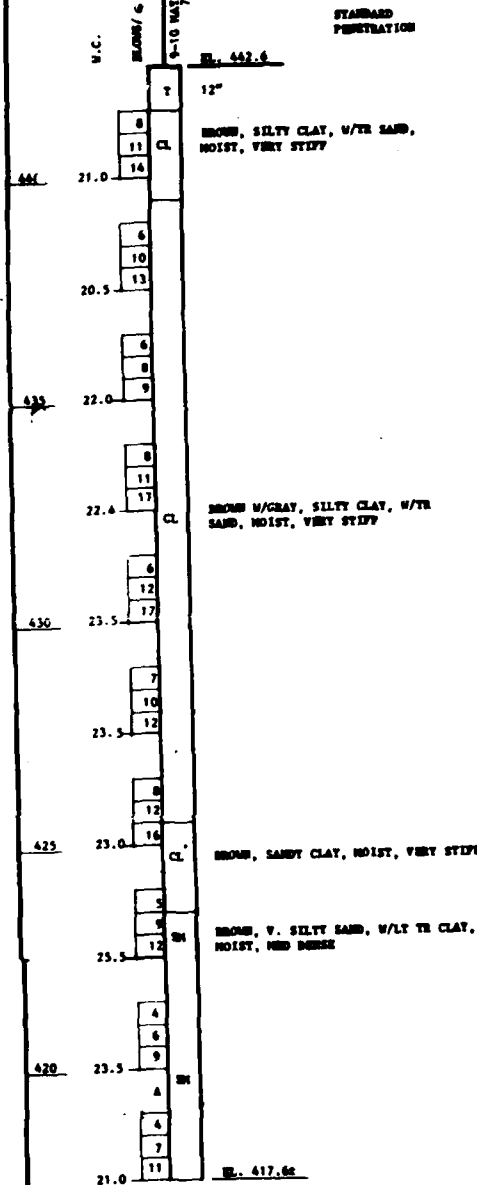
15 AUG 1982

EL. 442.0 CONTOUR
6" (DRILLER'S CLASS)

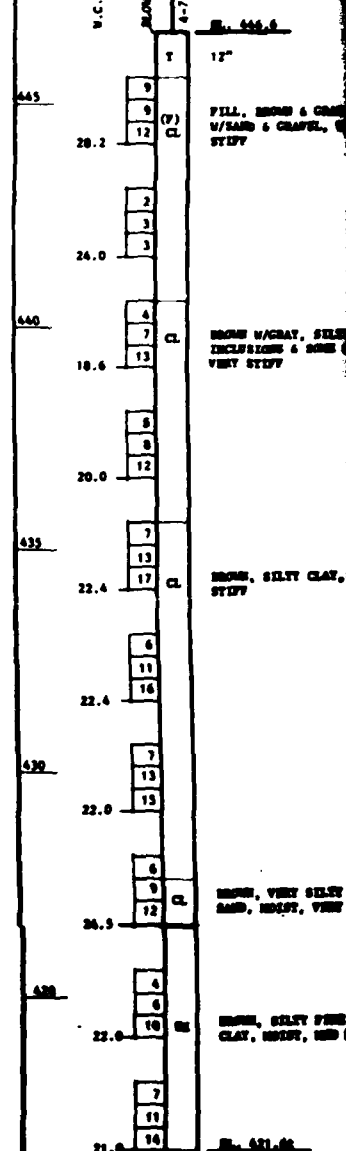
T

CL BR, SILTY CLAY, FIRM, MOIST
(DRILLER'S CLASS)

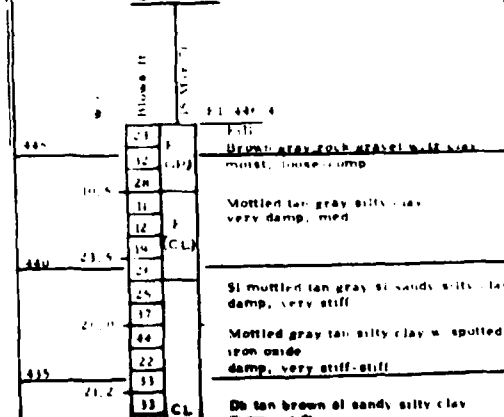
AP-2132



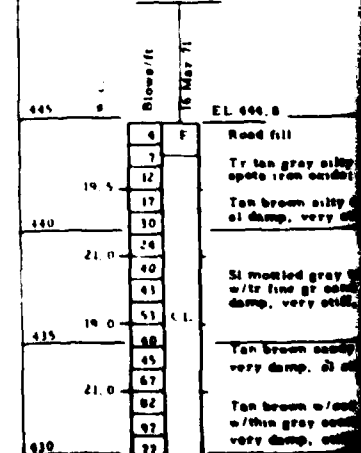
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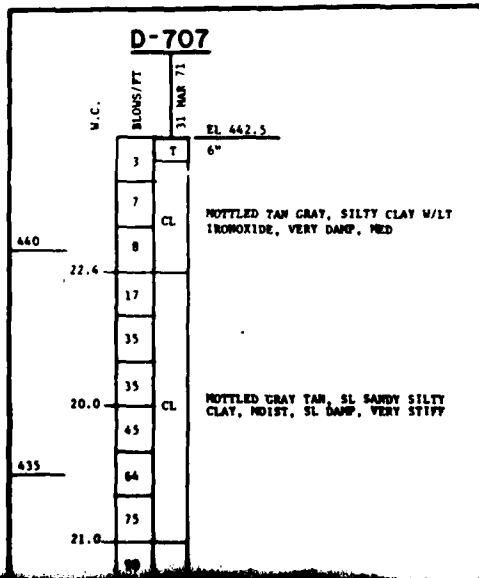
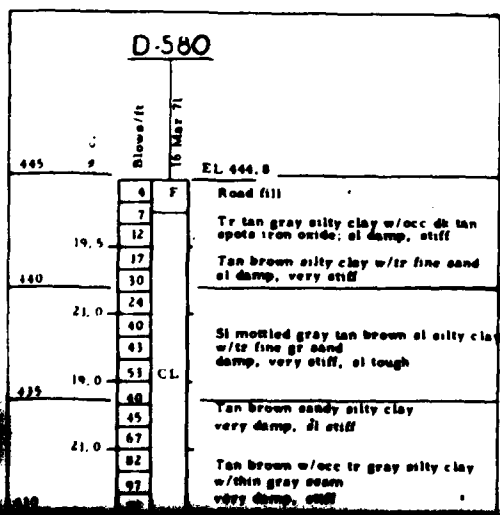
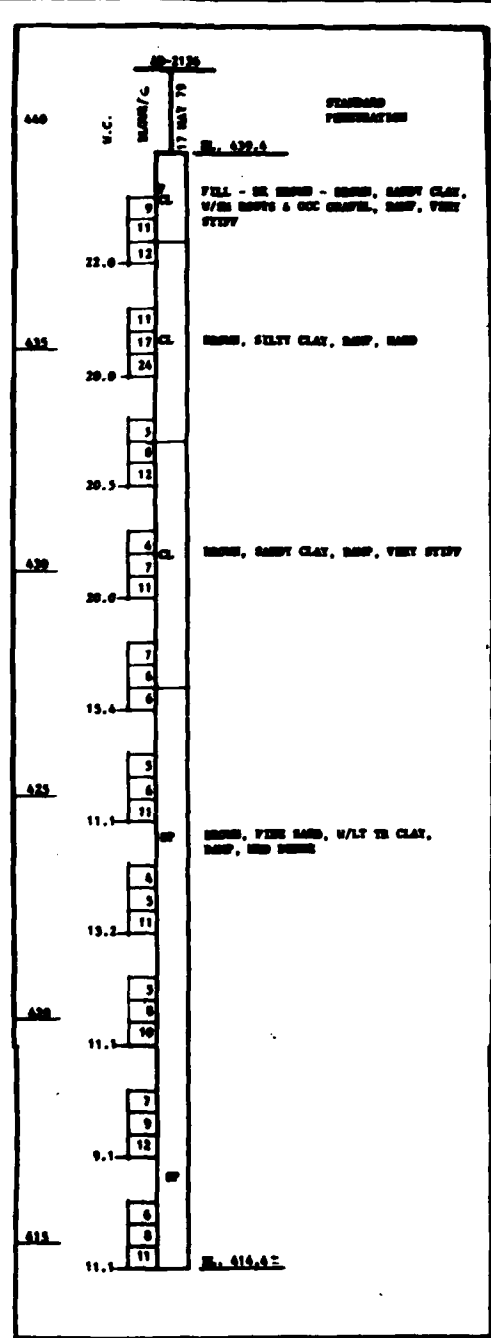
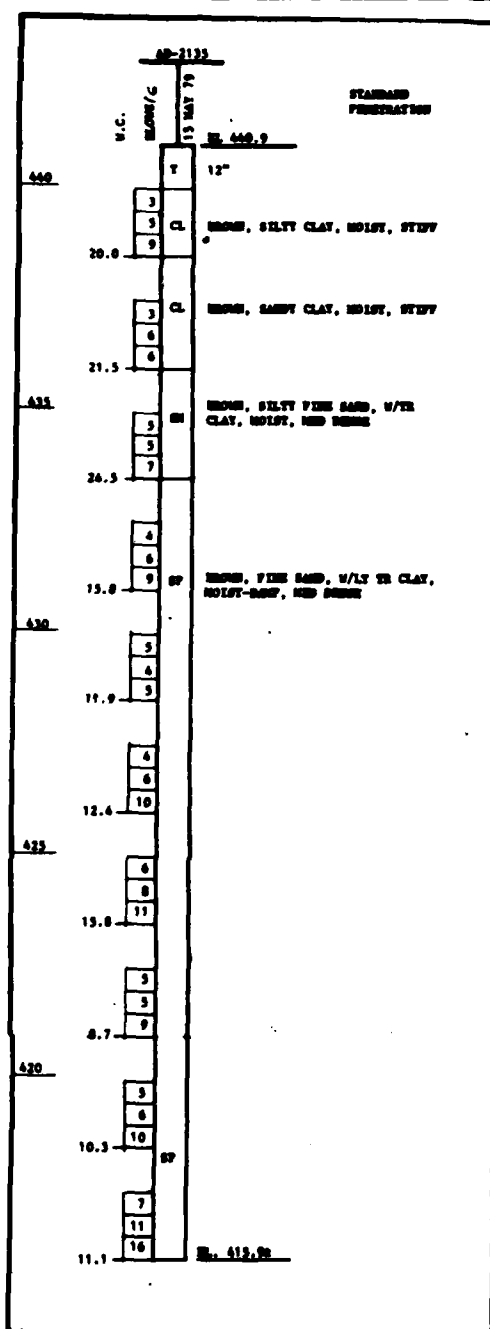
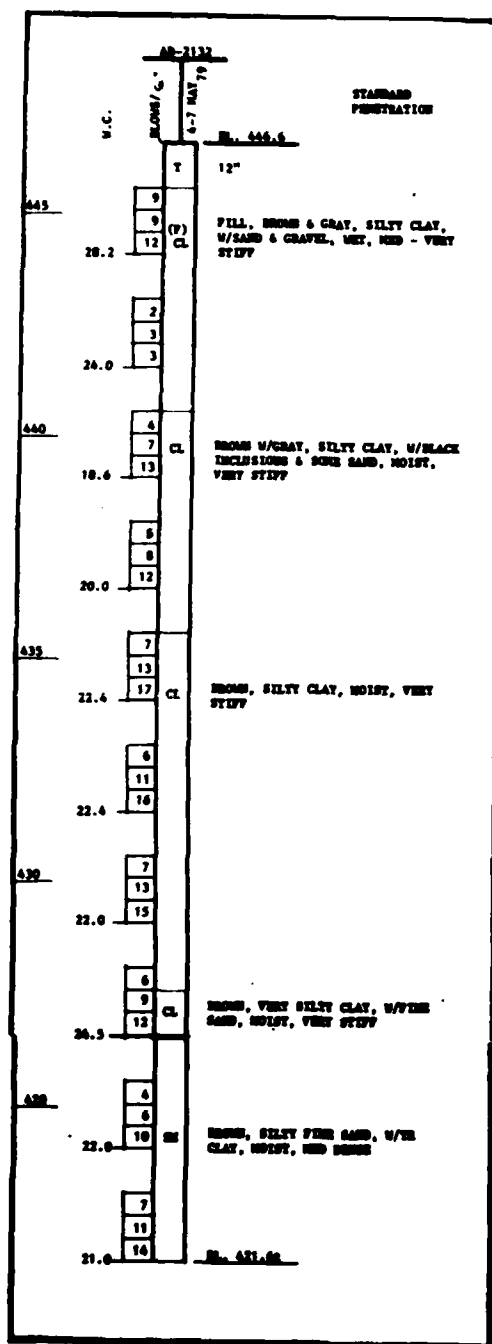


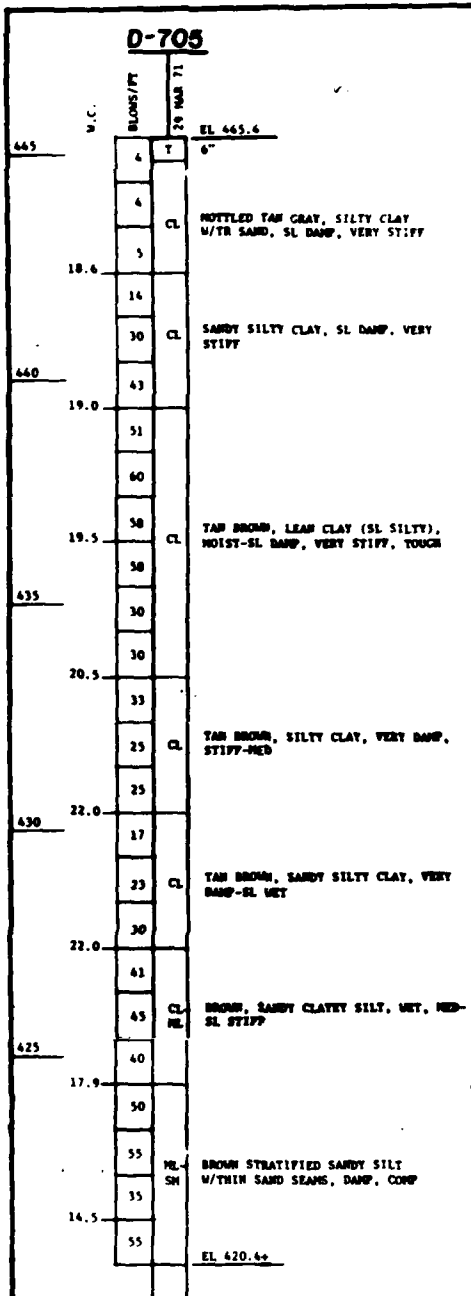
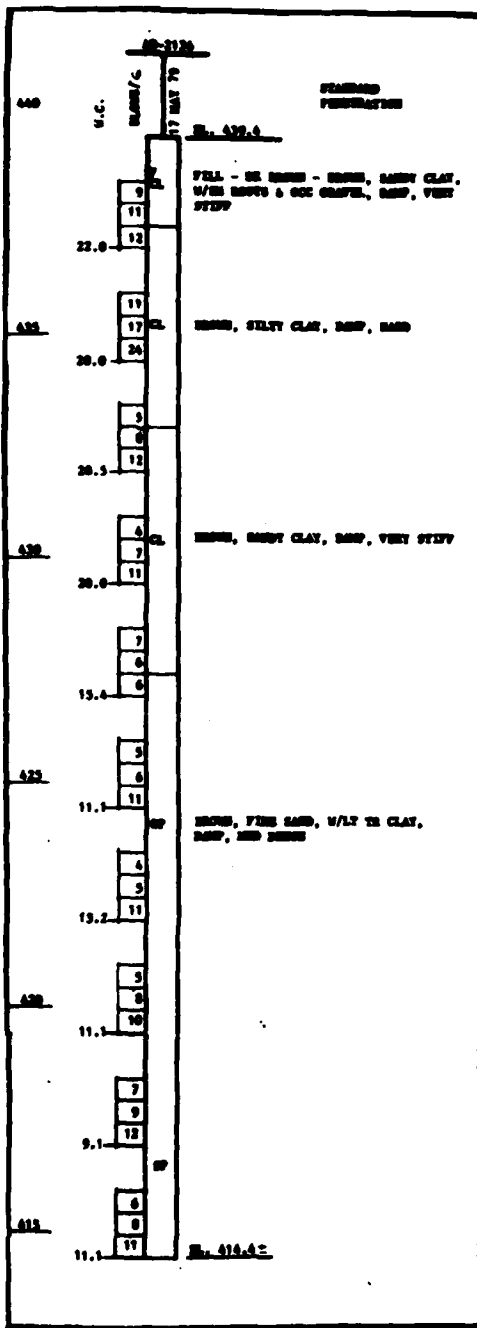
D-579



D-580



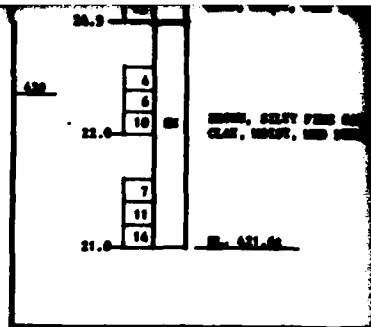
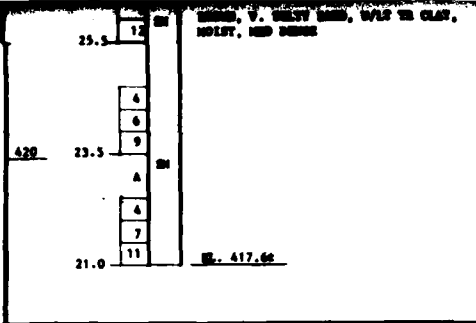
[illegible]



Revisions			
Symbol	Descriptions	Date	Approved

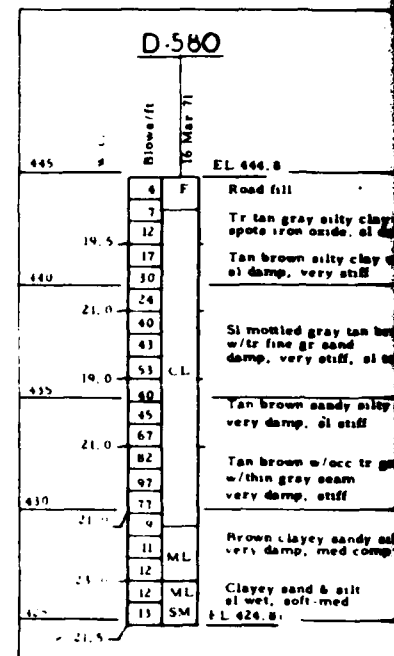
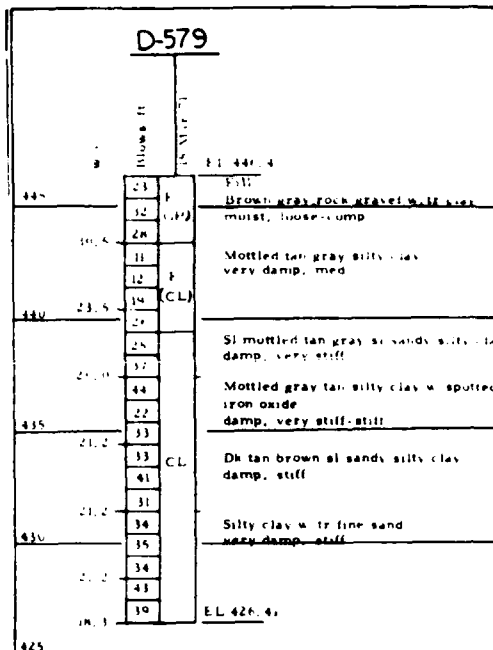
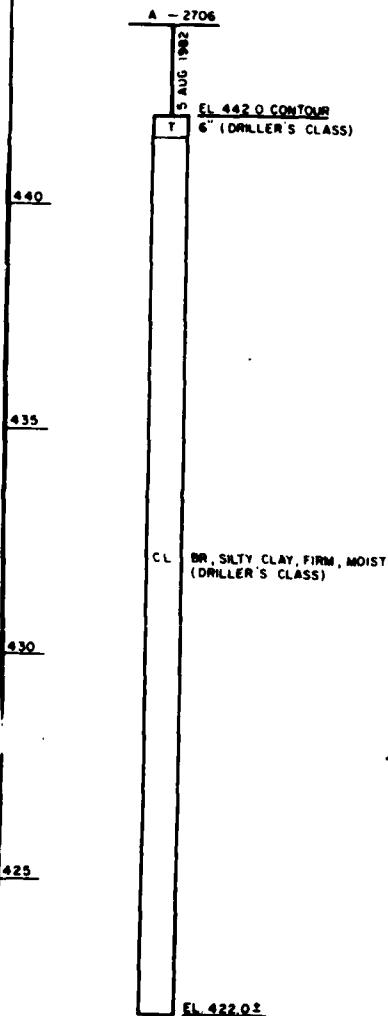
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE KENTUCKY

314 ML Gray brown sandy silt
damp, mod. comp
211
294 EL 401.7a



B

A

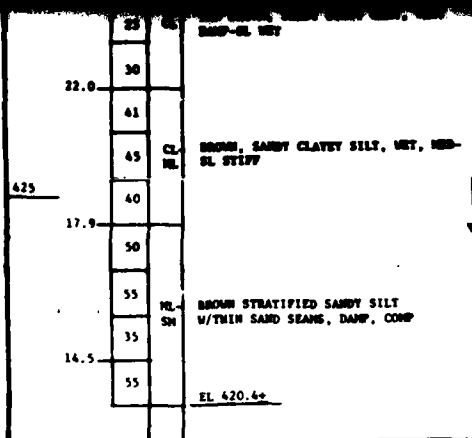


5

4


4

Symbol	
Designed by:	
Drawn by:	
Checked by:	
Reviewed by:	
Approved by:	



Revisions					
Symbol	Description	Date	Approved		

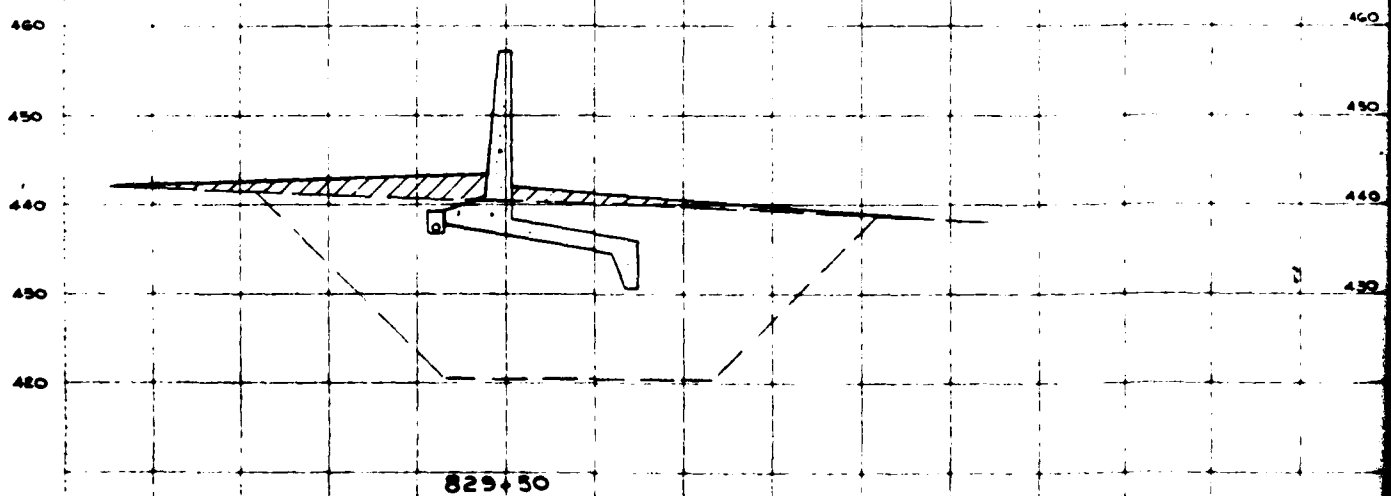
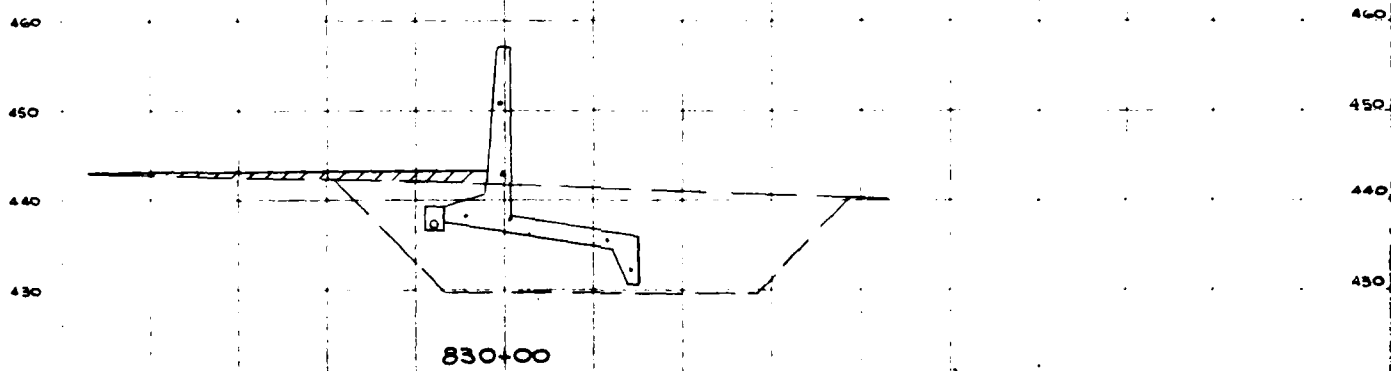
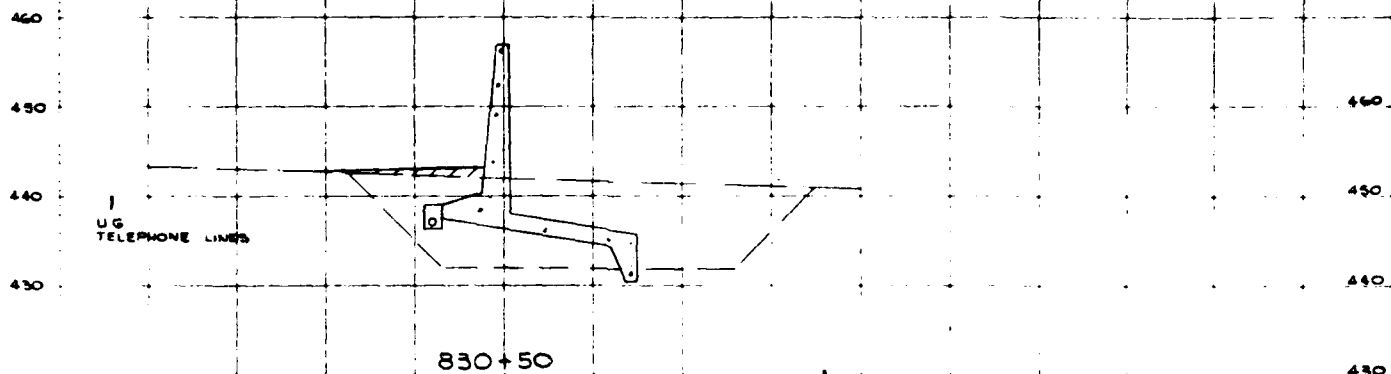
**U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
LOUISVILLE KENTUCKY**

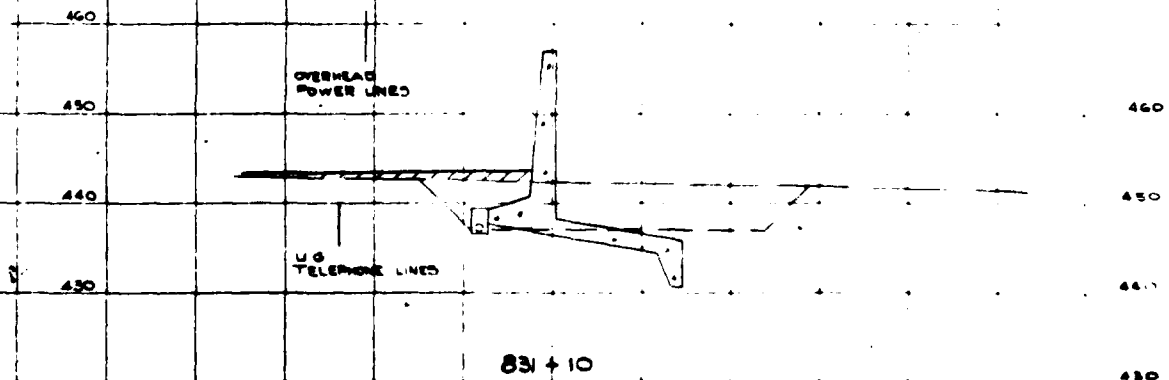
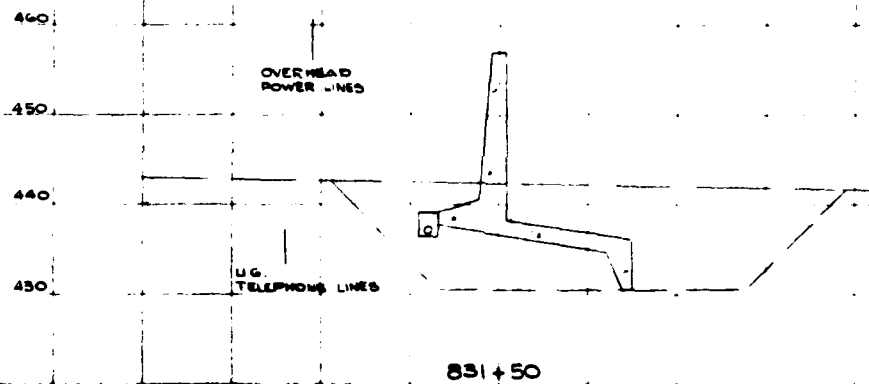
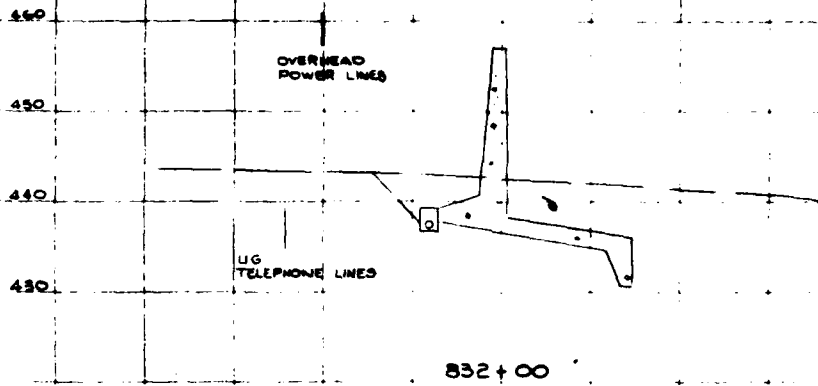
Designed by:	 U.S. Army Corps of Engineers SOUTHWEST JEFFERSON COUNTY, KY. LOCAL FLOOD PROTECTION SECTION 4 BORING LOGS				
Drawn by:					
Checked by:					
Reviewed by:	Scale:	Sheet reference number:			
Approved by:	Date:				
	Drawing Code: PLATE 7		Sheet _ _ of _		

2

1

CORPS OF ENGINEERS





3
U. S. ARMY

460

OVERHEAD
POWER LINES

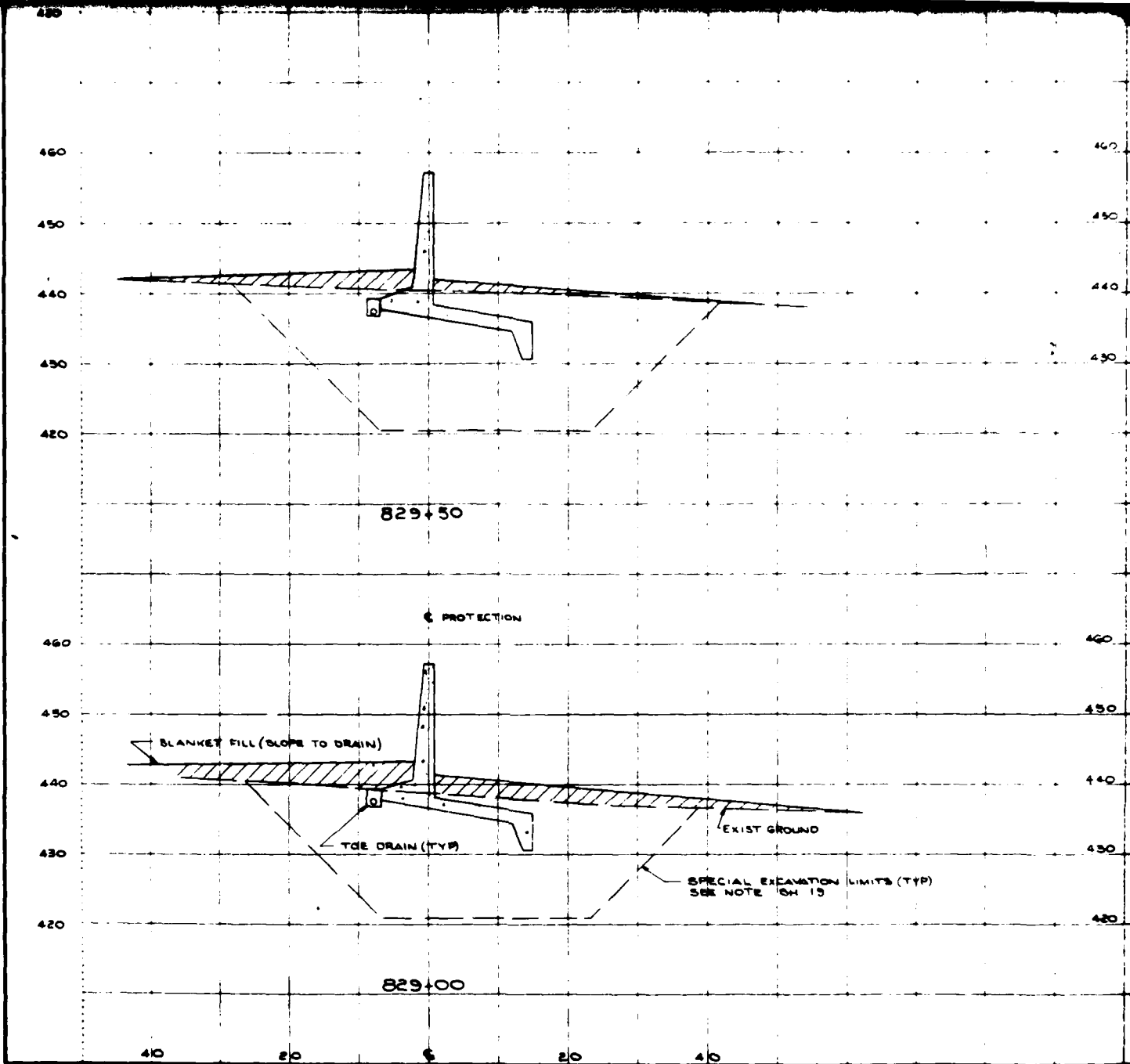
450

440

430

UG
TELEPHONE LINES

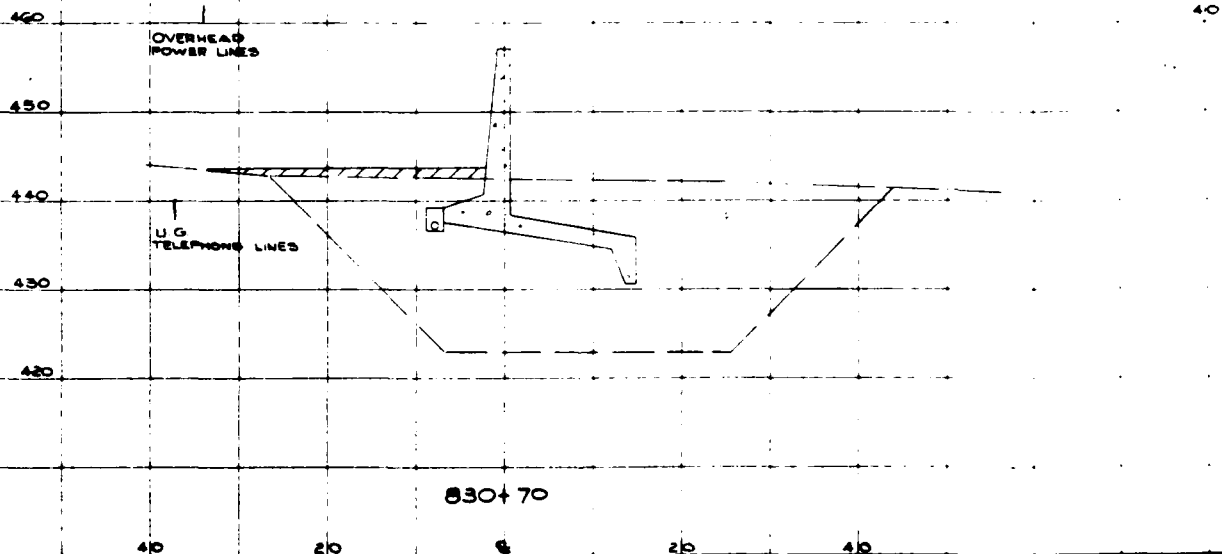
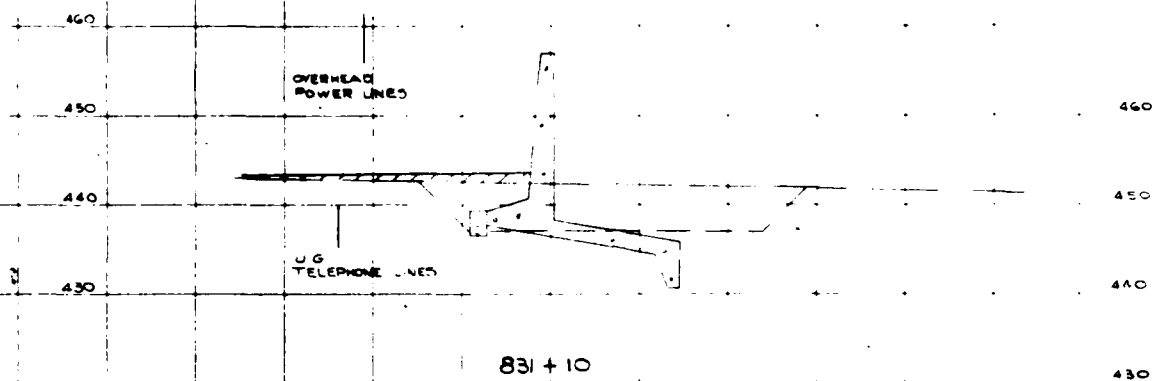
832 + 30



LOW BLUE CO 228A

4

831+50



OVER
POWER

UG
TELEPHONE

UG
TELEPHONE

REVISION

DESIGN

DRAWN

CHECKED

SUBMIT

SCALE

PL

5

460

OVERHEAD
POWER LINES

450

440

430

UG
TELEPHONE LINES

832+30

40

20

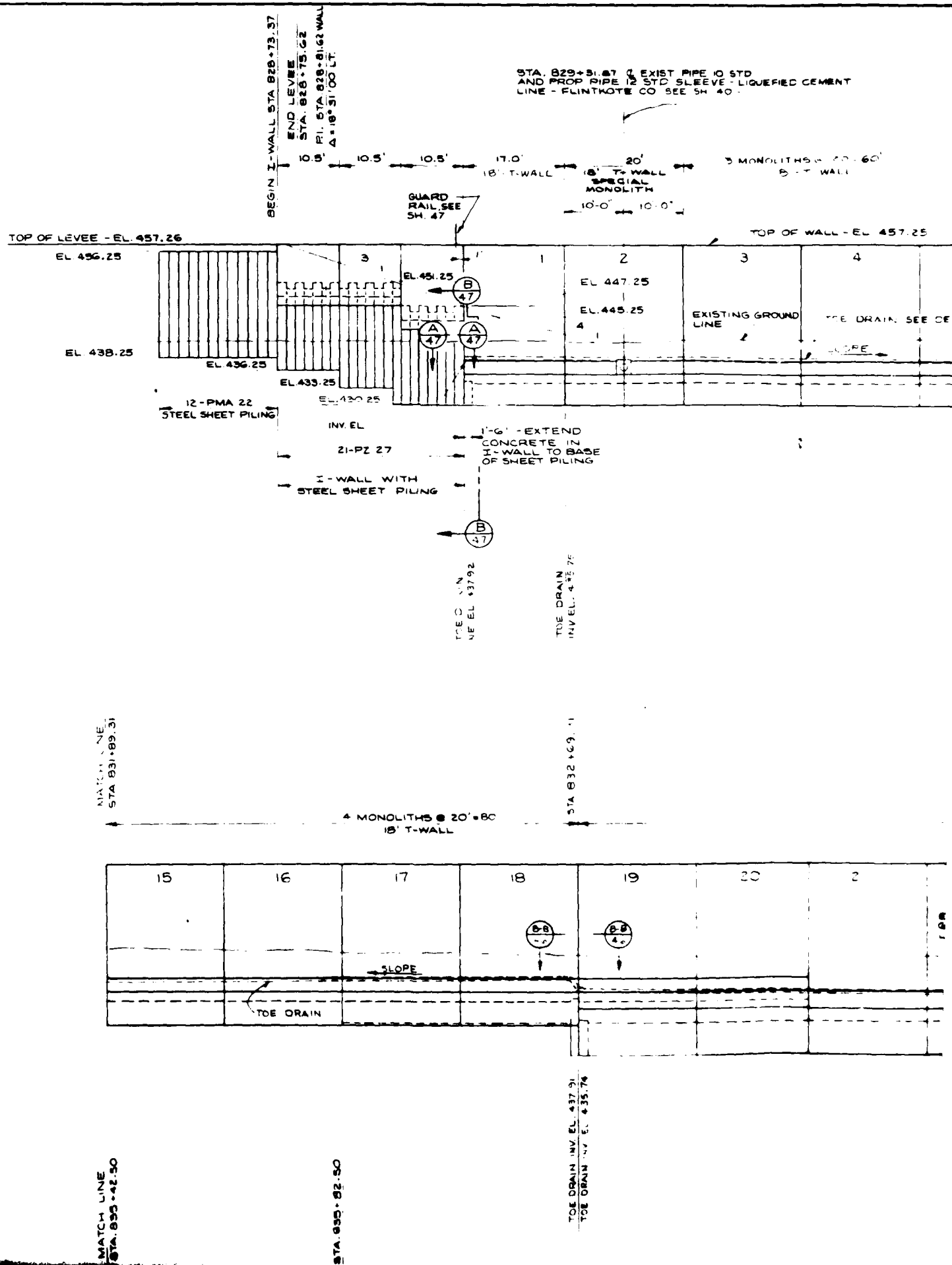
E

20

40

REVISION		DATE	DESCRIPTION	BY
U. S. ARMY ENGINEER DISTRICT, LOUISVILLE CORPS OF ENGINEERS LOUISVILLE KENTUCKY				
DESIGNED		VCR SOUTHWESTERN JEFFERSON COUNTY, KY. LOCAL FLOOD PROTECTION SECTION-4 WALL SECTIONS SHEET 1 OF 3		
DRAWN	TRACED			
	Loehr			
CHECKED				
Rosenberg				
SUBMITTED				
Sparks				
SCALE	1" = 10'	DATE	AUG 82	
PLATE 9		DRAWING NUMBER 616-12.10/18A		

CORPS OF ENGINEERS



2

PE 10 STD
SLEEVE - LIQUEFIED CEMENT
SH. 40

STA 830+00 87

EQ STA 831+02.86 BK.
(WALL) = RI STA 831+
03.85 AL.
Δ = 18' 58" R

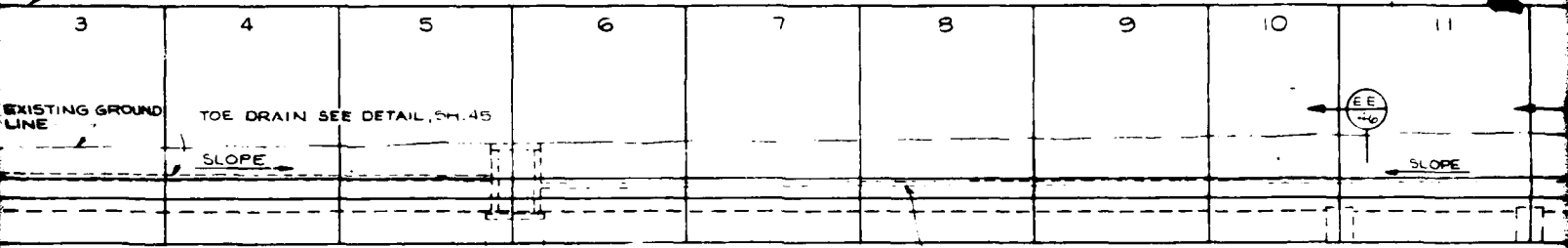
3 MONOLITHS @ 20' = 60'
18' T-WALL

4 MONOLITHS @ 20' = 80'
18' T-WALL

5
18' T-WALL

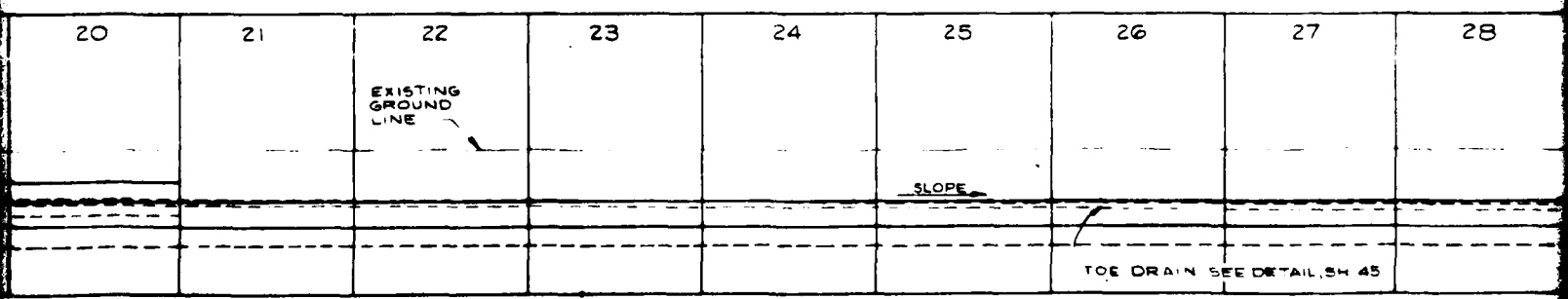
22.07'
18' T-WALL
SPECIAL
MONOLITH
16.08'

TOP OF WALL - EL. 457.25



TOE DRAIN
INV. EL. 457.43
TOE DRAIN
INV. EL. 436.58

12 MONOLITHS @ 20' = 240'
20' T-WALL



MATCH LINE
STA 839+02.50



26	27	28	29	30	31	32
				2. GATEWELL STA 895+32.5 (FLINTKOTE OUTLET)	FIN. GRADE	
					36 R.C.P. INV. EL. 450.63	
TOE DRAIN SEE DETAIL, SH 45				CUTLINE OF EXISTING FLUME		

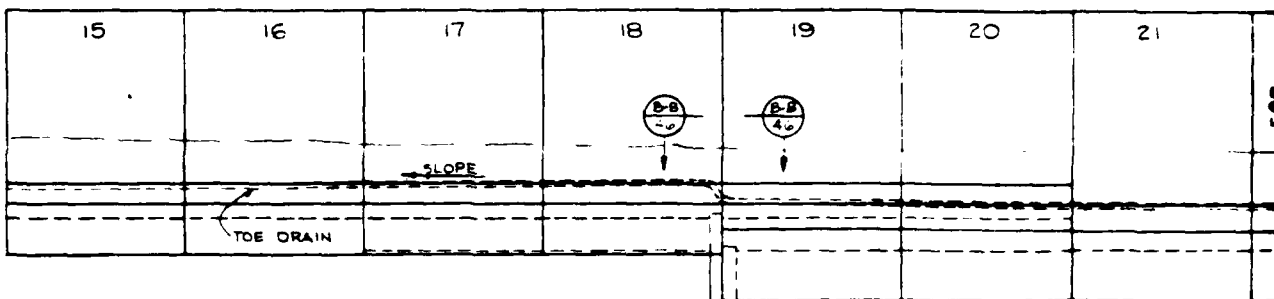
MATCH LINE
STA. 838+02.50

1. SEE PLAN OF LEVEE AND WALL FOR CLARIFICATION OF HORIZONTAL CONTROL WALL MONOLITH STATIONING IS BASED ON WALL SURVEY EXCEPT AS SHOWN OTHERWISE.
2. FOR SITE PLAN OF MOUK LANE CLOSURE SEE SH 22
3. FOR SITE PLANS OF VALVEWELL AND GATEWELL AT STA. 835 + 1.5 SEE SHEET 23
4. ALL MANHOLES FOR THE DRAINS (T-1, T-2, T-3 & T-4) SHALL BE KY. STD TYPE "B" MANHOLES, MODIFIED TO PROVIDE A 3'-0" DEEP SUMP PUMP WELL, 3'-0" BELOW THE LOWER PIPE INVERT. MANHOLE FRAMES & LIDS SHALL BE TYPE 2.
5. SLOPE ALL THE DRAINS .0080 1/1 TO MANHOLES, EXCEPT WHERE SHOWN OTHERWISE AT 2-WALLS.

MATCH LINE
STA. 631+89

4 MONOLITHS @ 20' = 80'
15' T-WALL

STA. 632+69

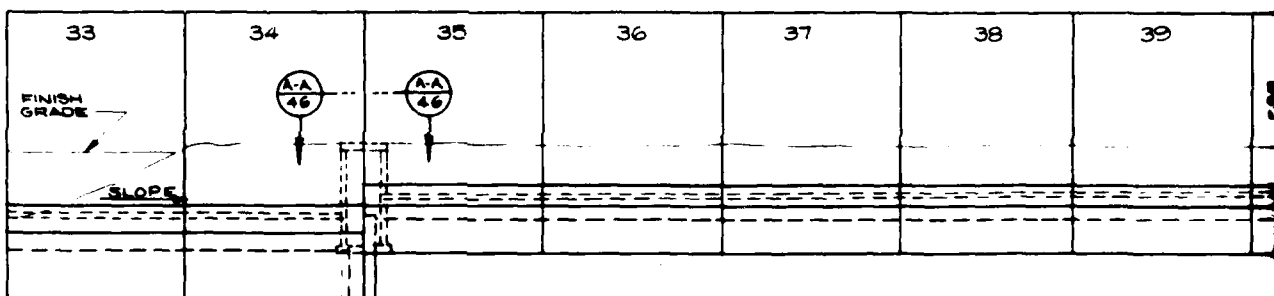


MATCH LINE
STA. 635+42.50

2 MONOLITHS @ 20' = 40'
20' T-WALL

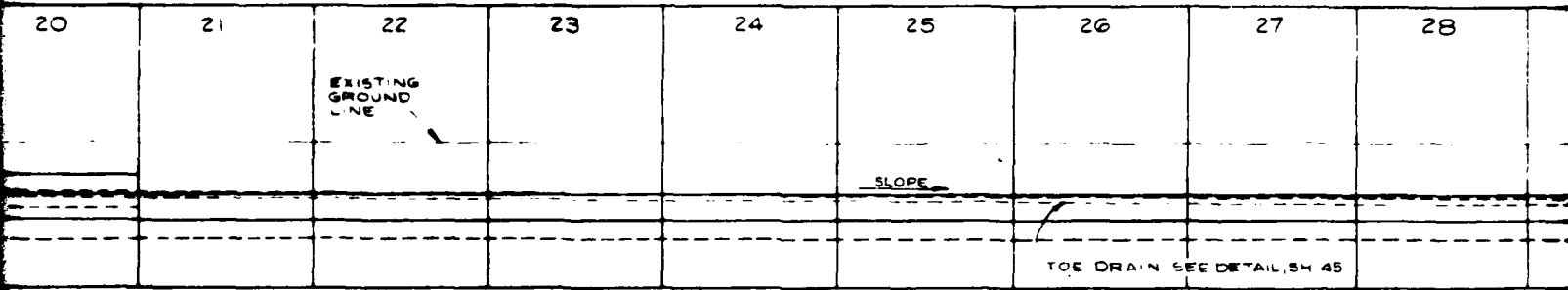
STA. 635+82.50

TOE DRAIN INV. EL. 437.91
TOE DRAIN INV. EL. 435.74



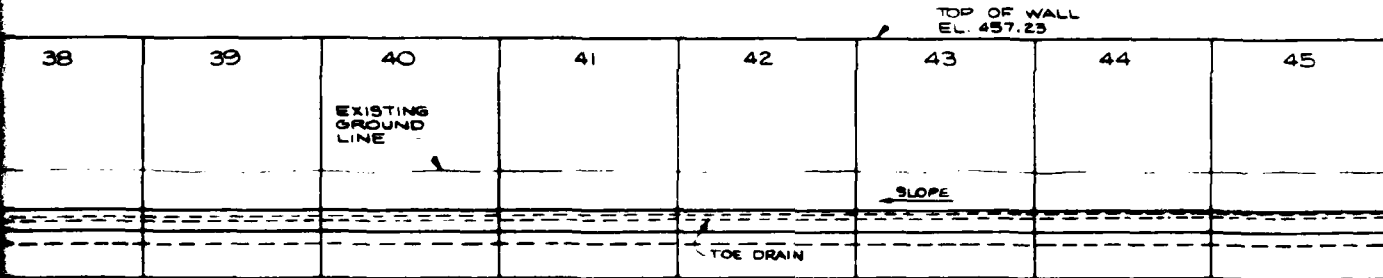
TOE DRAIN
INV. EL. 434.17
MANHOLE T2
TOE DRAIN
INV. EL. 436.19

12 MONOLITHS @ 20' = 240'
20' T-WALL



11 MONOLITHS @ 20' = 220'
18' T-WALL

MATCH LINE
STA. 838+02.50



PROFILE
(RIVERSIDE)

10 0 10 20 FT.

5

20'
SPECIAL MONOLITH

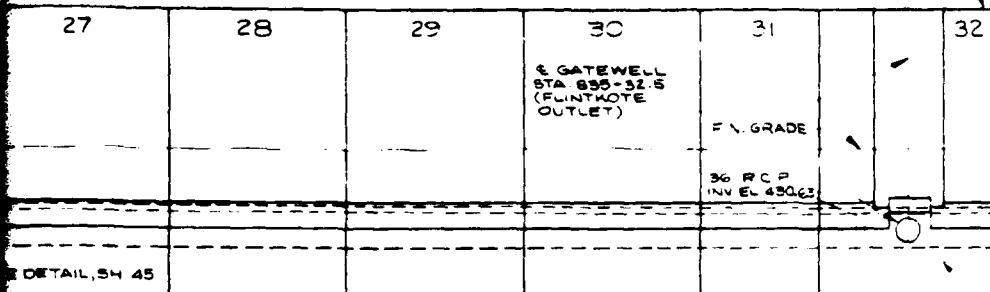
STA 835+09.31

STA 835+22.5

TOP OF WALL
EL. 45'-24"

STA 835+42.50

3'-0"
I-WALL



OUTLINE OF EXISTING FLUME

NOTES

1. SEE PLAN OF LEVEE AND WALL FOR CLARIFICATION OF HORIZONTAL CONTROL. WALL MONOLITH STATIONING IS BASED ON WALL SURVEY EXCEPT AS SHOWN OTHERWISE.
2. FOR SITE PLAN OF HOUK LANE CLOSURE, SEE SH 22
3. FOR SITE PLANS OF VALVEWELL AND GATEWELL AT STA. 835+32.5 SEE SHEET 23.
4. ALL MANHOLES FOR TOE DRAINS (T-1, T-2, T-3 & T-4) SHALL BE KY. STD. TYPE "B" MANHOLES, MODIFIED TO PROVIDE A 3'-0" DEEP SUMP PUMP WELL, 3'-0" BELOW THE LOWER PIPE INVERT. MANHOLE FRAMES & LIDS SHALL BE TYPE 2.
5. SLOPE ALL TOE DRAINS .0050 1/1 TO MANHOLES, EXCEPT WHERE SHOWN OTHERWISE AT I-WALLS.
6. AFTER CONSTRUCTION OF WALL FINISH GRADE ADJACENT TO THE WALL SHALL BE BROUGHT TO THE ORIGINAL GROUND LEVEL EXCEPT WHERE SHOWN OTHERWISE ON THIS SHEET OR ON TYPICAL SECTIONS

ATCH LINE
STA 836+02.50

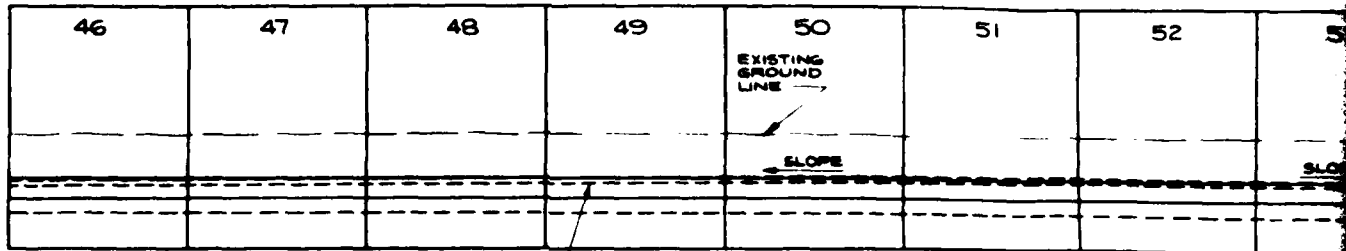
45

REVISION	DATE	DESCRIPTION	BY	APP'D
U. S. ARMY ENGINEER DISTRICT, LOUISVILLE				
CORPS OF ENGINEERS				
LOUISVILLE, KENTUCKY				
DESIGNED:	J.M.E.			
DRAWN:	C.E.R.	SOUTHWESTERN JEFFERSON COUNTY, KY.		
CHECKED:	MAR	LOCAL FLOOD PROTECTION		
SECTION:	SECTION - 4			
DATE:	RIVERSIDE ELEVATIONS			
DATE:	WALL MONOLITHS			
DATE:	SHEET 1 OF 2			
DATE:	AUG 82			
DATE:	65 SHOWN			
DRAWING NUMBER		616-12.10/17		
PLATE 10				

6

CORPS OF ENGINEERS

STA. 838+02.80
MATCH LINE



TOE DRAIN
SEE DETAIL,
SH.45

EXISTING
GROUND
LINE

SLOPE

SLOPE

STA. 842+38.1 & EXIST. WATER MAINS
(24" 20' CIP (BIS) (FLINTKOTE CO.)
REMOVE & PLUG PIPES AT WALL SEE SH.40

& OVERHEAD POWER LINE TO BE RAISED BY OWNER

MONOLITH JT. EQ. STA. 842+44.64 BK
= STA. 842+53.33 AH

TOE DRAIN INV. EL. 437.89

MATCH LINE
STA. 841+42.50

3 MONOLITHS @ 20'-60'-0"
18' T-WALL

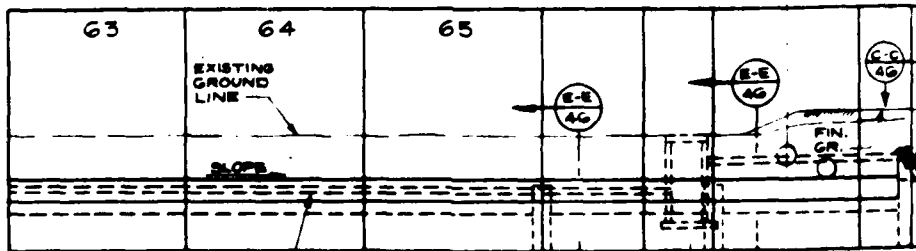
STA. 842+02.50

NO. 66 SPECIAL
MONOLITH
18' T-WALL

STA. 842+21.70

NO. 67 SPECIAL
MONOLITH
18' T-WALL

2'-0" ABUT.



EXISTING
GROUND
LINE

SLOPE

TOE DRAIN
SEE DETAIL,
SH.45

E-E
AG

E-E
AG

E-E
AG

TOP OF WALL
EL. 487.21

GUARD RAIL

EXIST. SOUTHWEST
DUAL-LANE

EXIST. 8' PAVED
SHOULDER
C.J. (TYP.)

UNDERGROUND TEL.
(TWIN 150 PAIR CABLES)
TO BE RELOCATED BY OWNER.

NOTE: MONOLITH NO. 68 DELETED

DRIVEWAY & FLINTKOTE
CLOSURE
STA. 845+08.83

NOTE:
EXISTING CONVEYOR STRUCTURE
CROSSED PROTECTION ABOVE
CLOSURE - STA. 845+08.83

TOE DRAIN
INV. EL. 434.34

MANHOLE
4'-5"

TOE DRAIN
INV. EL. 439.95

MATCH LINE
STA. 844+75.06

STA. 844+88.06 BK
STA. 844+81.33 AH

STA. 844+86.91

STA. 844+75.06

STA. 844+75.06

STA. 844+75.06

2

17 MONOLITHS @ 20' = 340'
18' T-WALL

52	53	54	55	56	57	58	59	60
SLOPE								

TOE DRAIN INV. EL. 437.89

DIXIE HWY. CLOSURE
STRUCTURE - SYMMETRICAL
@ STA. 842+00

DIXIE HWY.
(STA. 842+00
FLOOD PROT.)

OVERHEAD
TEL. LINES
TO BE RELOCATED
BY OWNER

OVERHEAD
ELECT. LINES TO
BE RELOCATED
BY OWNER.

NOTE:
HIGH VOLTAGE ELECT.
ARE ATTACHED TO CO

PIER

EXISTING CONVEYOR
NEAR SIDE OF LEB

2'-0" ABUT.

2'-0" ABUT.

CLEAR WIDTH OF CLOSURE STRUCTURE

125'-10" (123.85')

17'-0"

3 MONO

TOP OF WALL
EL. 487.21

TOP OF WALL
EL. 487.21

GUARD RAIL



22' EXIST. SOUTHBOUND
DUAL-LANE

11'-8" EXIST.
MEDIAN
STRIP

22' EXIST. NORTHBOUND
DUAL-LANE

EXIST
DITCH

2" HP GAS LINE TO BE
ALTERED BY OWNER
CONTRACTOR TO IN-
STALL SLEEVE SEE SH. 16

75 PAIR
TELEPHONE
CABLE - TO BE
RELOCATED BY OWNER

70

71

72

ST. 8' PAVED
SHOULDER

C.J.
(TYP)

69

SLOPE

SLOPE

UNDERGROUND TEL.
(TWIN 150 PAIR CABLES)
TO BE RELOCATED BY OWNER.

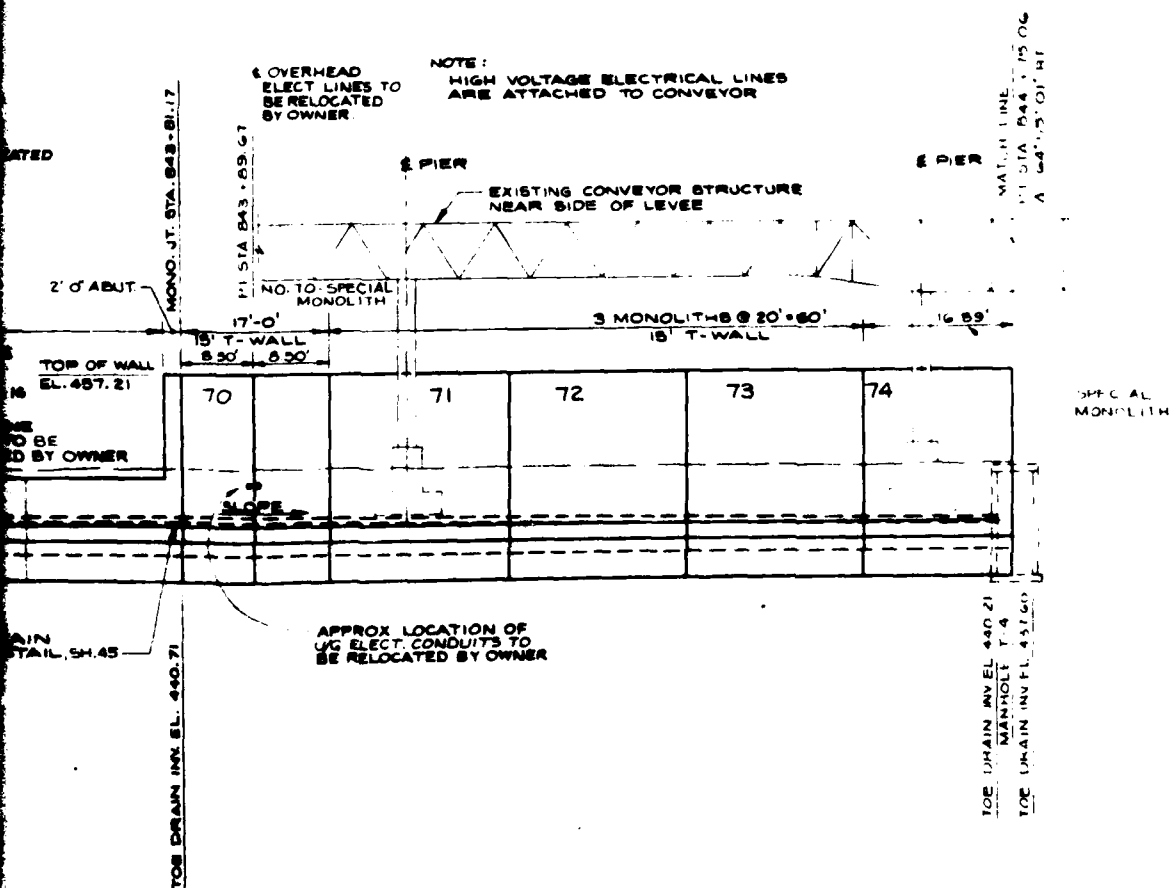
EXIST. 8' PAVED
SHOULDER

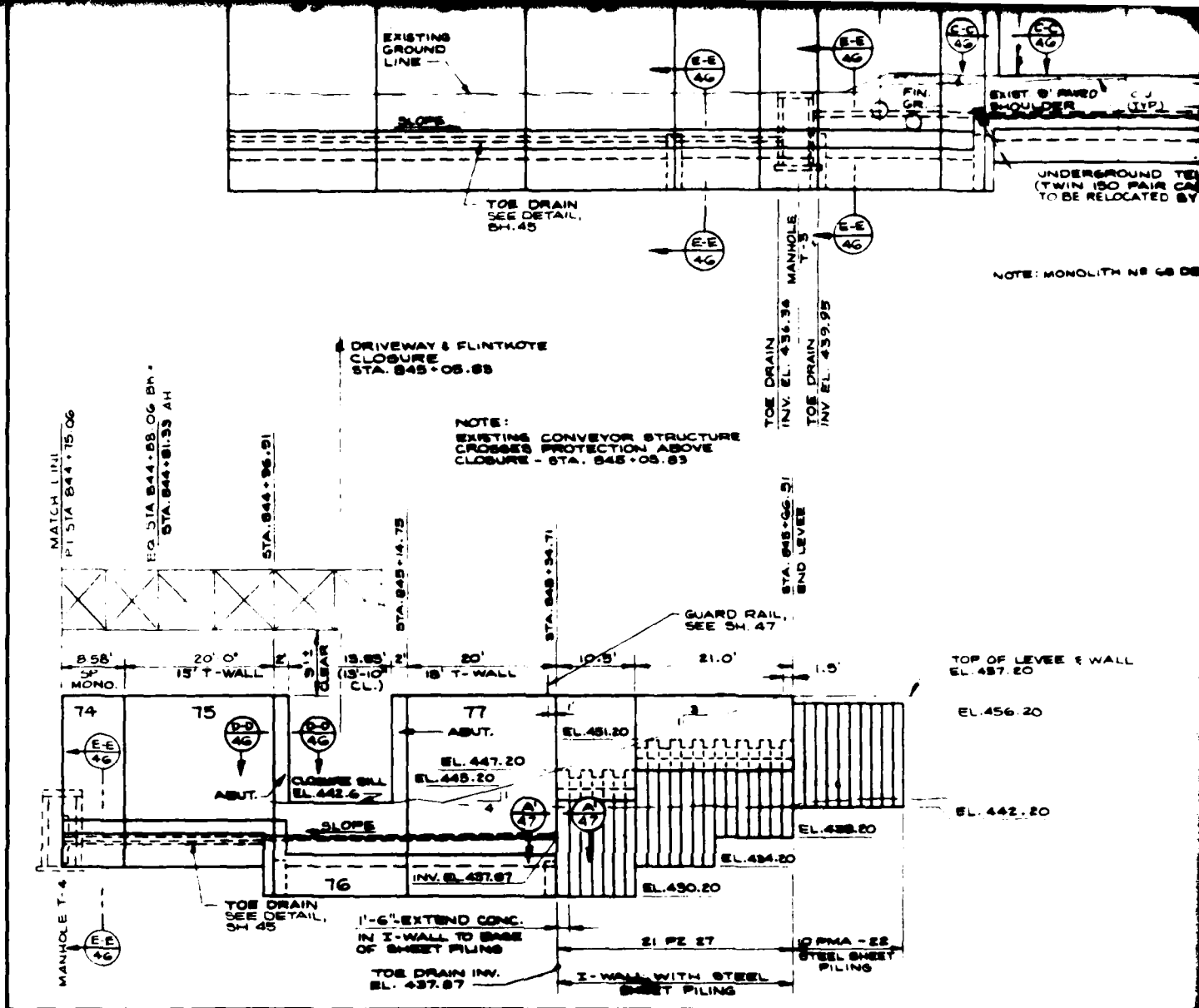
TOE DRAIN
SEE DETAIL, SH. 45

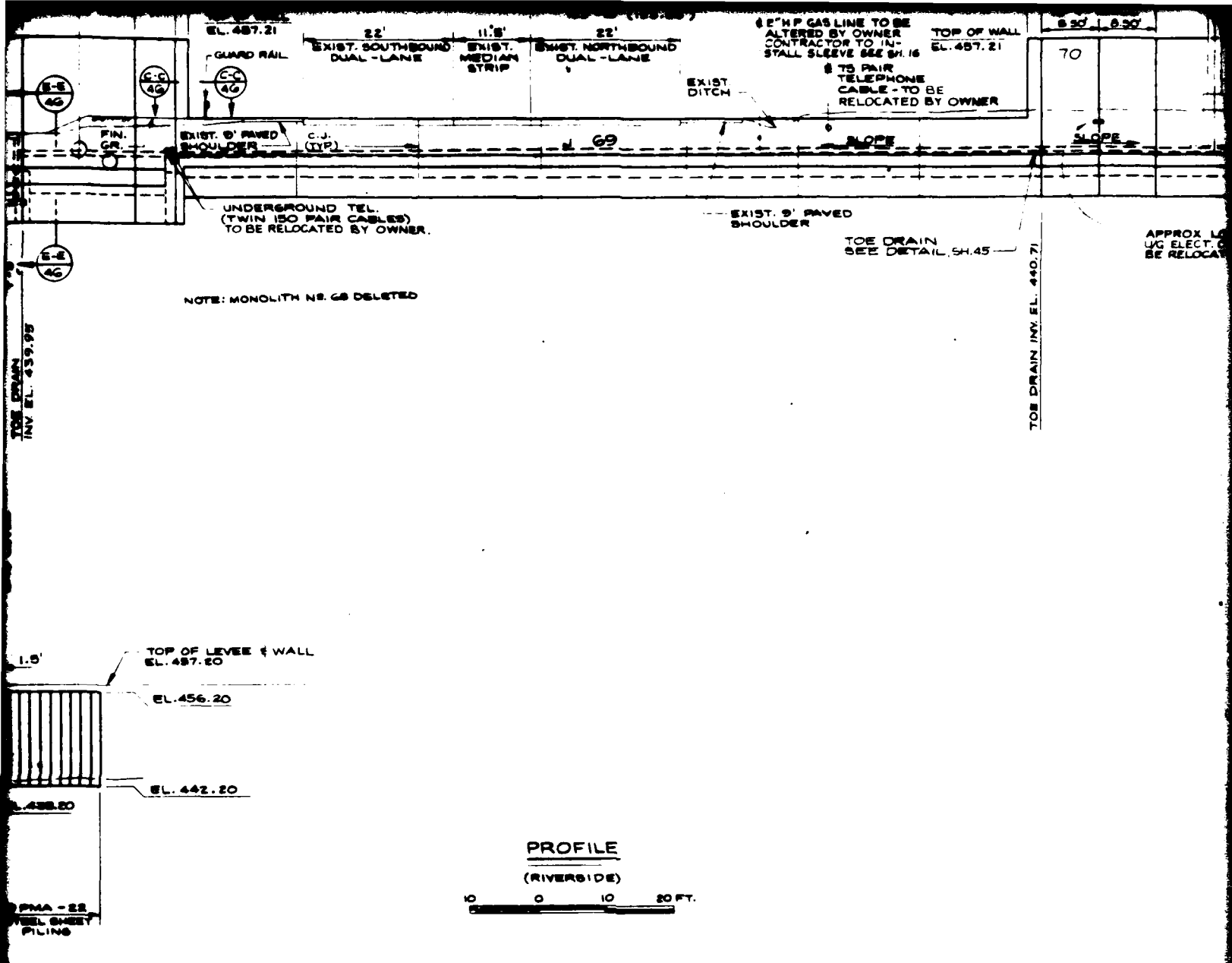
APPROX. LOCATION OF
UG ELECT. CONDUITS TO
BE RELOCATED BY OWNER

NOTE: MONOLITH NR. 68 DELETED

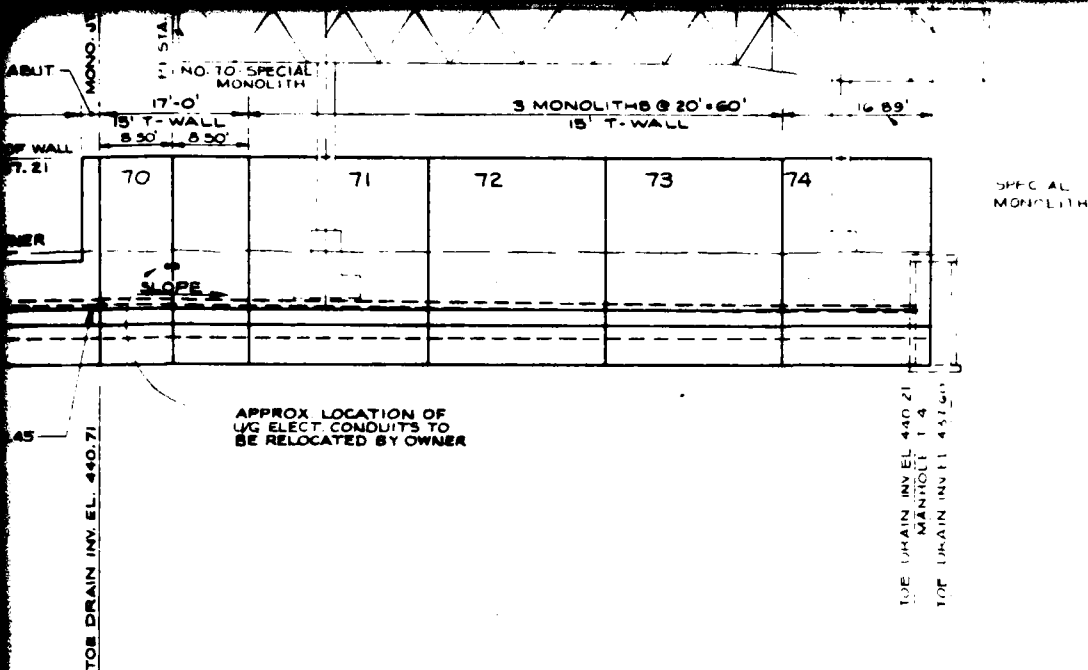
TOE DRAIN INV. EL. 440.71





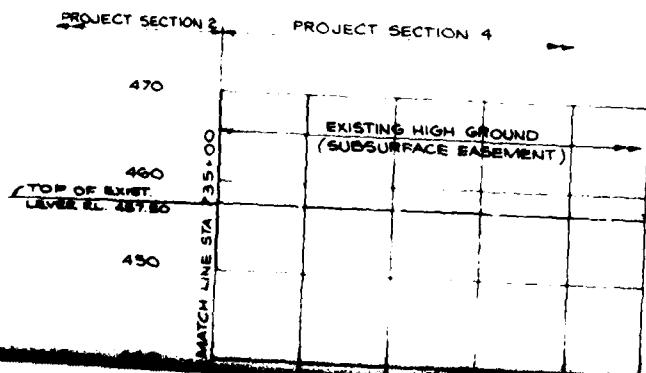
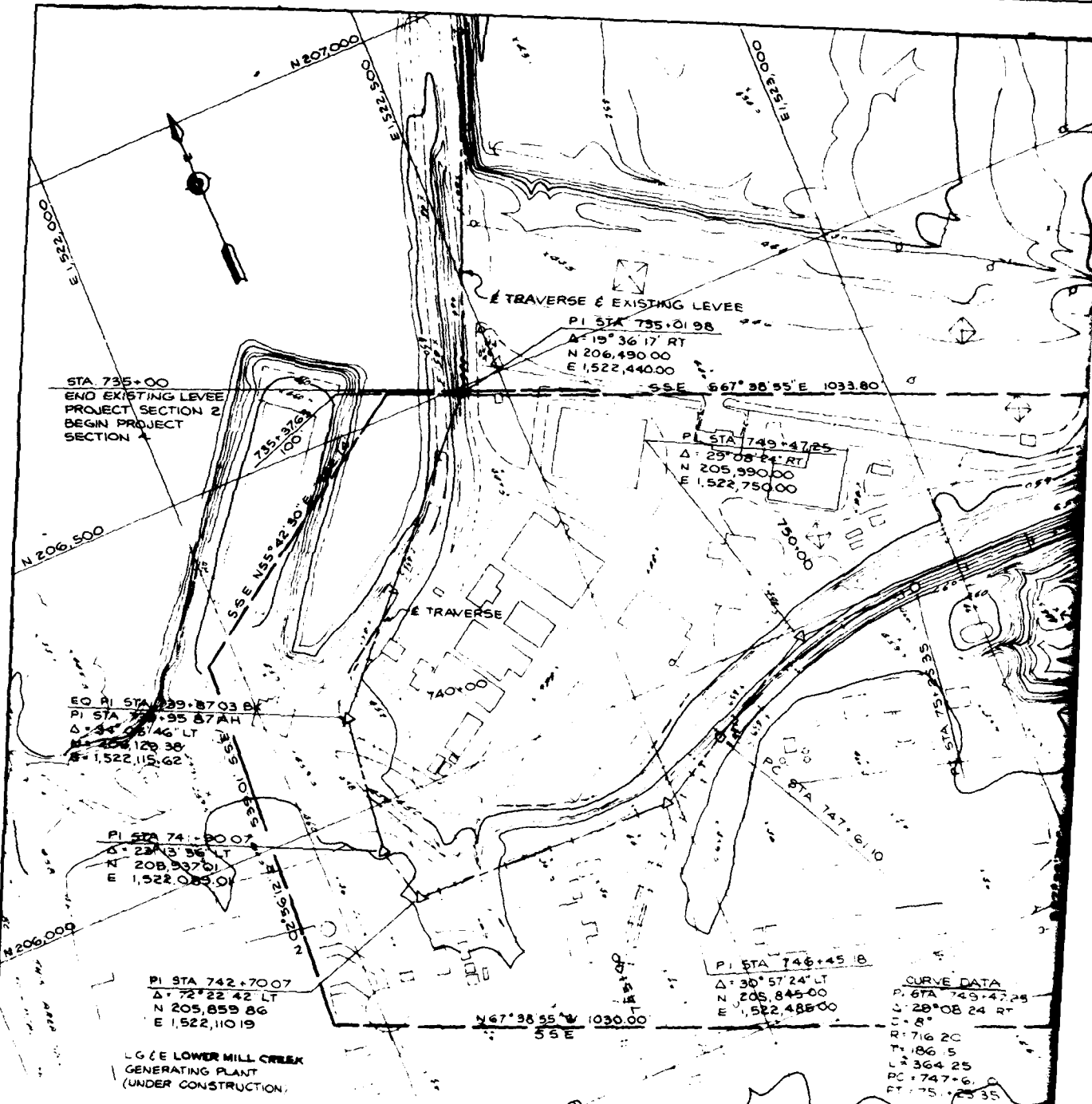


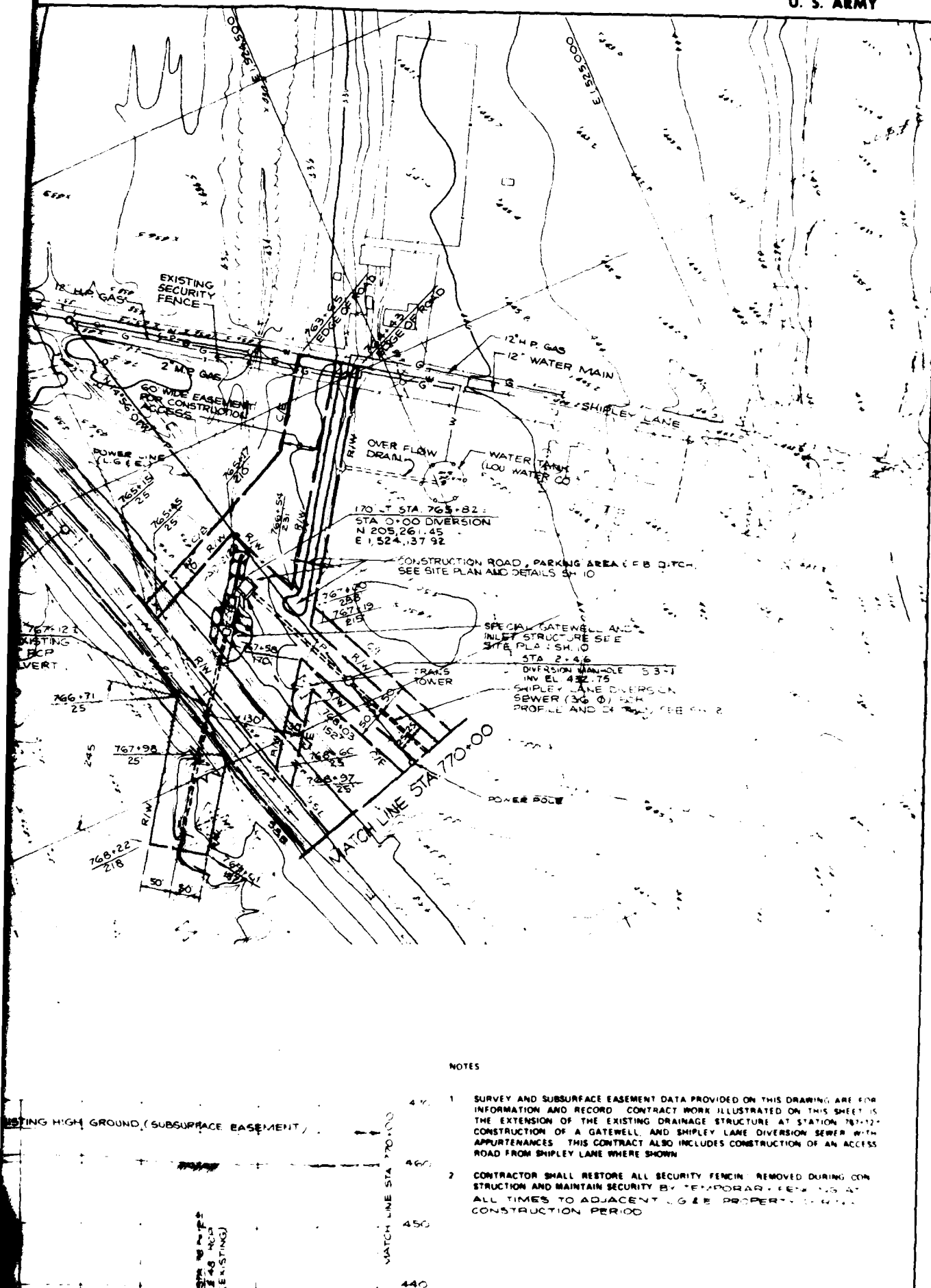
5



REVISION	DATE	DESCRIPTION	BY	APP'D
U. S. ARMY ENGINEER DISTRICT, LOUISVILLE CORPS OF ENGINEERS LOUISVILLE, KENTUCKY				
DESIGNED:	J.M.B.	SOUTHWESTERN JEFFERSON COUNTY, KY. LOCAL FLOOD PROTECTION SECTION - 4 RIVERSIDE ELEVATIONS WALL MONOLITHS SHEET 2 OF 2		
DRAWN:	C.E.R.			
CHECKED:	M.A.R.			
APPROVED:	<i>[Signature]</i>			
DATE		AUG 82		
DRAWING NUMBER		616-12.10/18		
PLATE II				

CORPS OF ENGINEERS





NOTES

- 1 SURVEY AND SUBSURFACE EASEMENT DATA PROVIDED ON THIS DRAWING ARE FOR INFORMATION AND RECORD. CONTRACT WORK ILLUSTRATED ON THIS SHEET IS THE EXTENSION OF THE EXISTING DRAINAGE STRUCTURE AT STATION 78+12. CONSTRUCTION OF A GATEWELL AND SHIPLEY LANE DIVERSION SEWER WITH APPURTENANCES. THIS CONTRACT ALSO INCLUDES CONSTRUCTION OF AN ACCESS ROAD FROM SHIPLEY LANE WHERE SHOWN.
- 2 CONTRACTOR SHALL RESTORE ALL SECURITY FENCING REMOVED DURING CONSTRUCTION AND MAINTAIN SECURITY BY TEMPORARY FENCING AT ALL TIMES TO ADJACENT U.G. & E. PROPERTY DURING CONSTRUCTION PERIOD.

M 206,000

PI STA 742+70.07
Δ = 72°22'42" LT
N 205,859.86
E 1,522,110.19

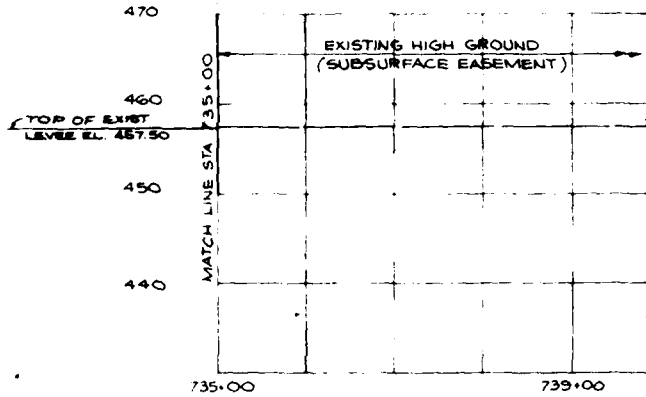
N 67°38'35" W 1030.00
55 E

Δ = 30°57'24" LT
N 205,845.00
E 1,522,485.00

CURVE DATA
PI STA 749+47.25
Δ = 28°08'24" RT
C = 8'
R = 716.20
T = 186.15
L = 364.25
PC = 747+61.0
PT = 751+25.35

LG & E LOWER MILL CREEK
GENERATING PLANT
UNDER CONSTRUCTION

PROJECT SECTION 2 PROJECT SECTION 4



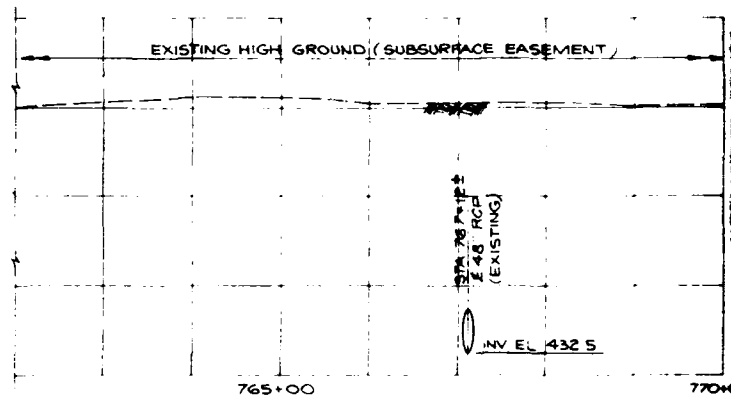
4

45+45.16
 41 LT
 45+00
 45+00
 CURVE DATA
 PI STA 749+47.25
 Δ: 28°08'24" RT
 D: 8°
 R: 716.20
 T: 186.15
 L: 364.25
 PC: 747+61.10
 PT: 751+25.35

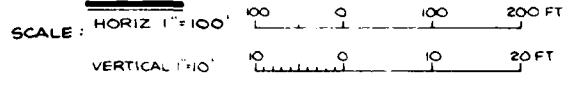
768+22
 218

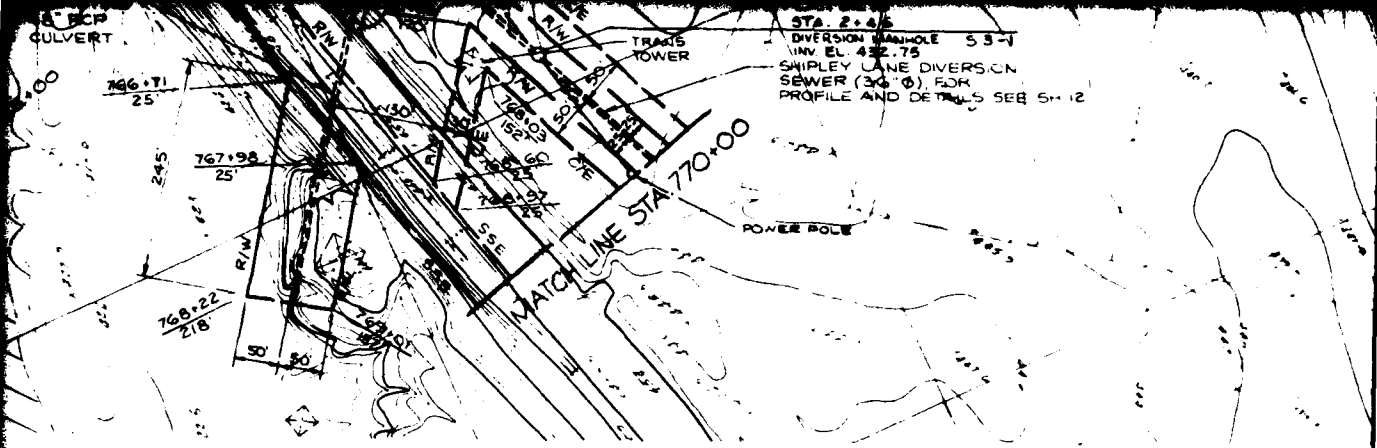
S.S.E.
 MATCH

PLAN



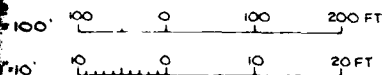
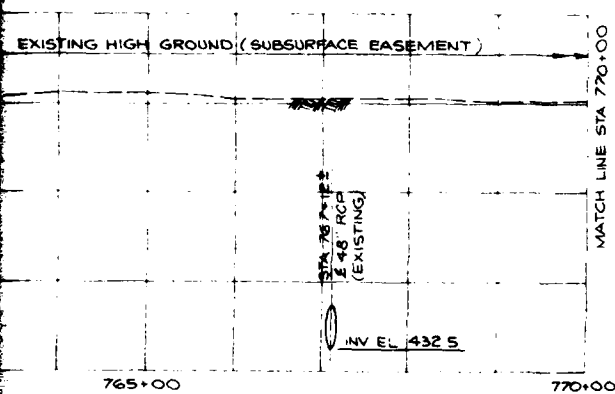
PROFILE





NOTES

1. SURVEY AND SUBSURFACE EASEMENT DATA PROVIDED ON THIS DRAWING ARE FOR INFORMATION AND RECORD. CONTRACT WORK ILLUSTRATED ON THIS SHEET IS THE EXTENSION OF THE EXISTING DRAINAGE STRUCTURE AT STATION 767+12.5, CONSTRUCTION OF A GATEWELL, AND SHIPLEY LANE DIVERSION SEWER WITH APPURTENANCES. THIS CONTRACT ALSO INCLUDES CONSTRUCTION OF AN ACCESS ROAD FROM SHIPLEY LANE WHERE SHOWN.
2. CONTRACTOR SHALL RESTORE ALL SECURITY FENCING REMOVED DURING CONSTRUCTION AND MAINTAIN SECURITY BY TEMPORARY FENCING AT ALL TIMES TO ADJACENT LG & E PROPERTY DURING CONSTRUCTION PERIOD.



REVISION	DATE	DESCRIPTION	BY	APP'D
<p align="center">U. S. ARMY ENGINEER DISTRICT, LOUISVILLE CORPS OF ENGINEERS LOUISVILLE, KENTUCKY</p>				
DESIGNED: <i>Michel</i> DRAWN: KLH CHECKED: MAR SUBMITTED: <i>John J. Smith</i> SEAL: AS SHOWN		<p align="center">SOUTHWESTERN JEFFERSON COUNTY, KY. LOCAL FLOOD PROTECTION SECTION-4 PLAN & PROFILE STA 735+00 TO STA. 770+00</p>		
PLATE 12		DRAWING NUMBER 616-12.10/5		

5



STA 775+50 ±



STA 776+00 ±



STA 777+00



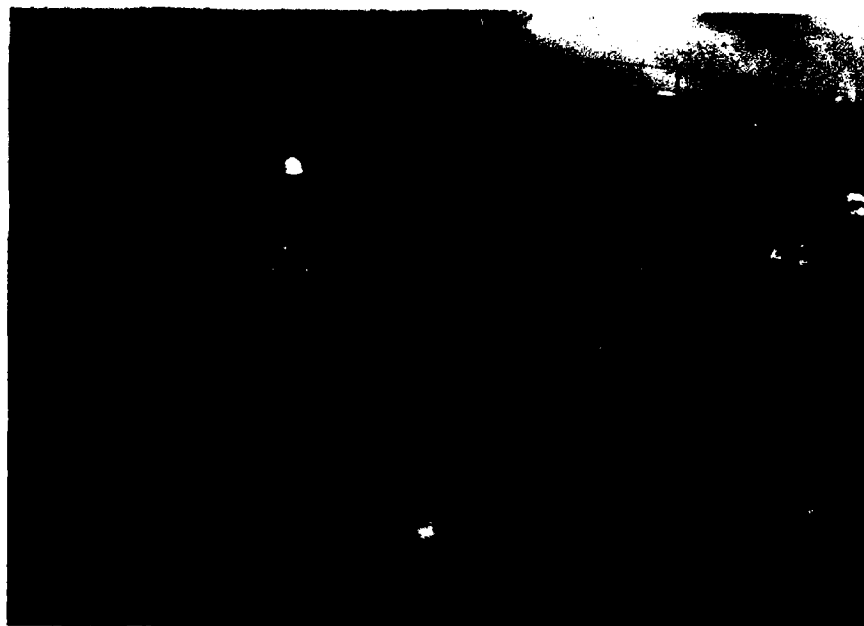
STA 777+00 ±



STA 777+00



STA 777+00



STA 777+00



STA 778+00



STA 778+00



STA 779+00



STA 780+00



STA 781+00



STA 782+00



STA 783+00



STA 784+00



STA 785+00



STA 786+00



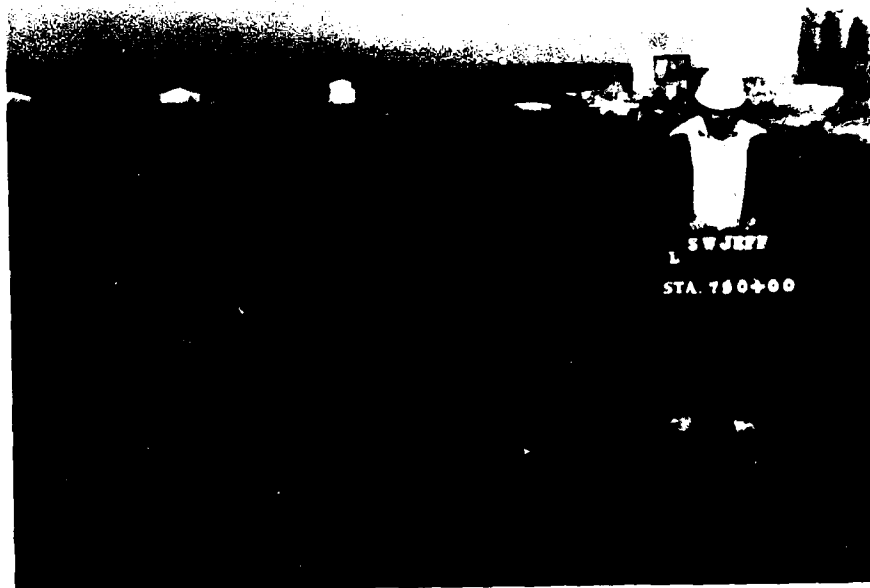
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STA 788+00



STA 789+00



STA 790+00



STA 790+00

AD-A140 388

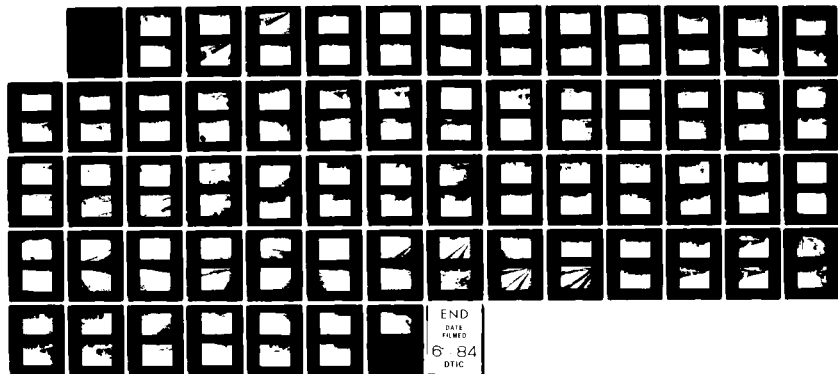
FLOOD PROTECTION SECTION 4 OHIO RIVER SOUTHWEST
JEFFERSON COUNTY KENTUCKY..(U) ARMY ENGINEER DISTRICT
LOUISVILLE KY G FITZGERALD APR 84 ORLCD-1-84

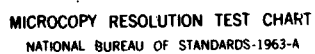
2/2

UNCLASSIFIED

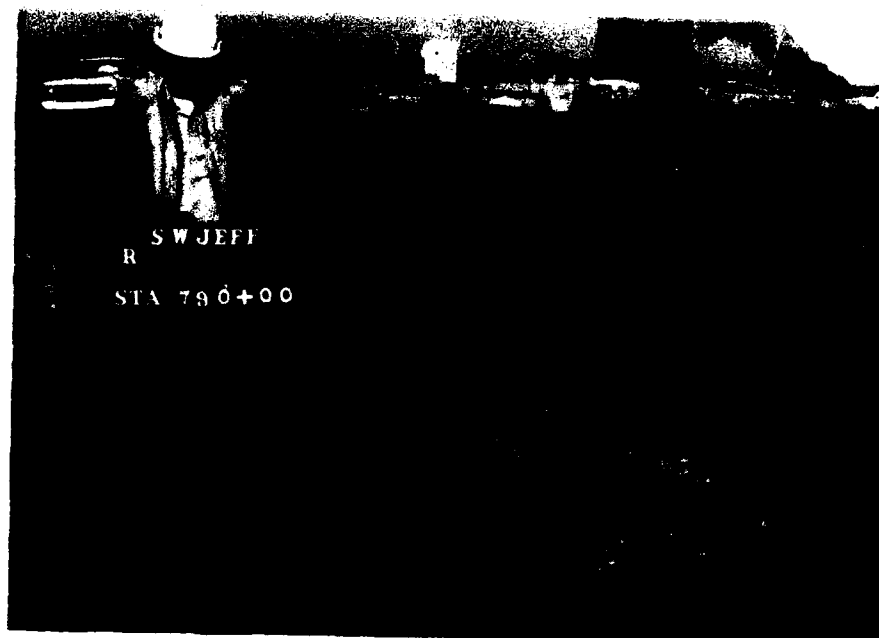
F/G 13/2

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

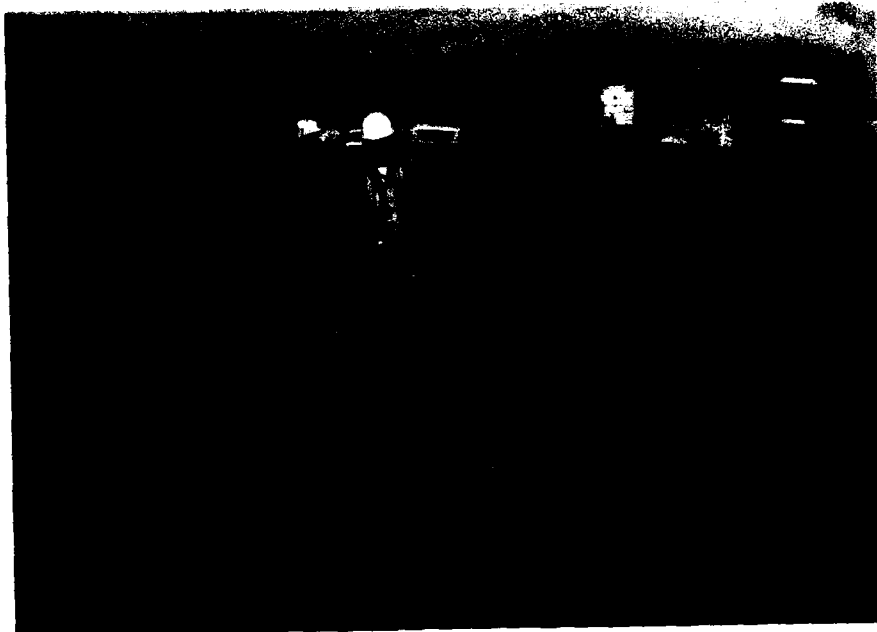


SWJEFF
R
STA 790+00

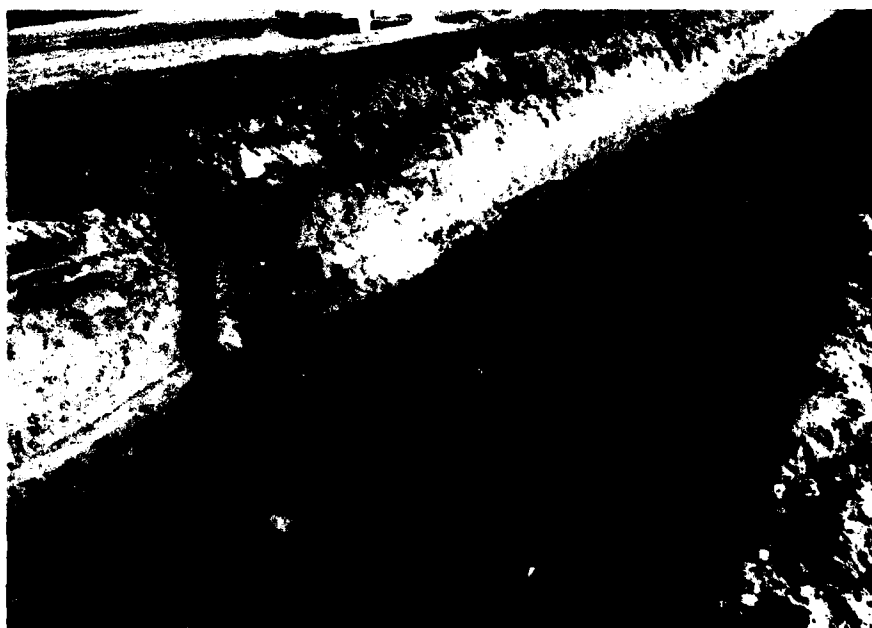
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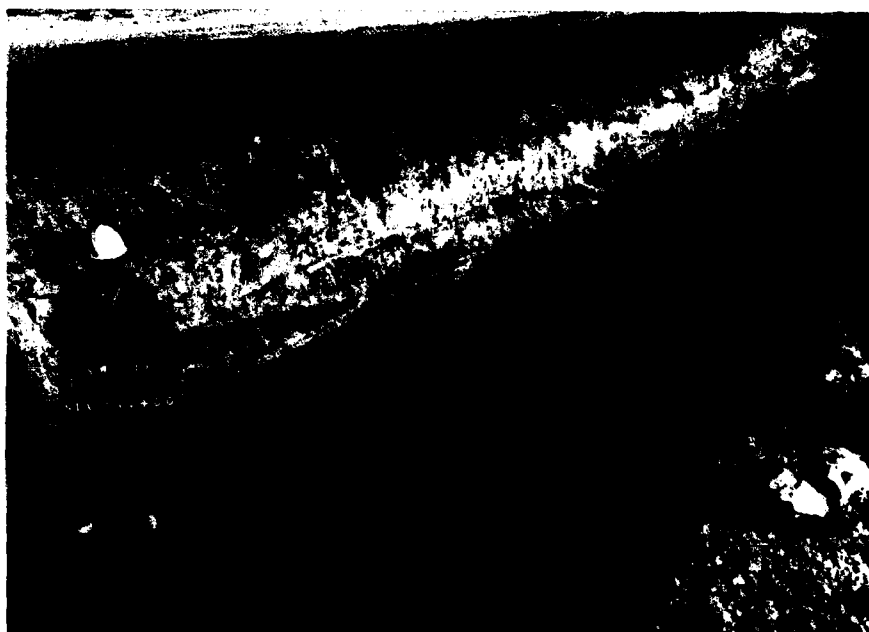
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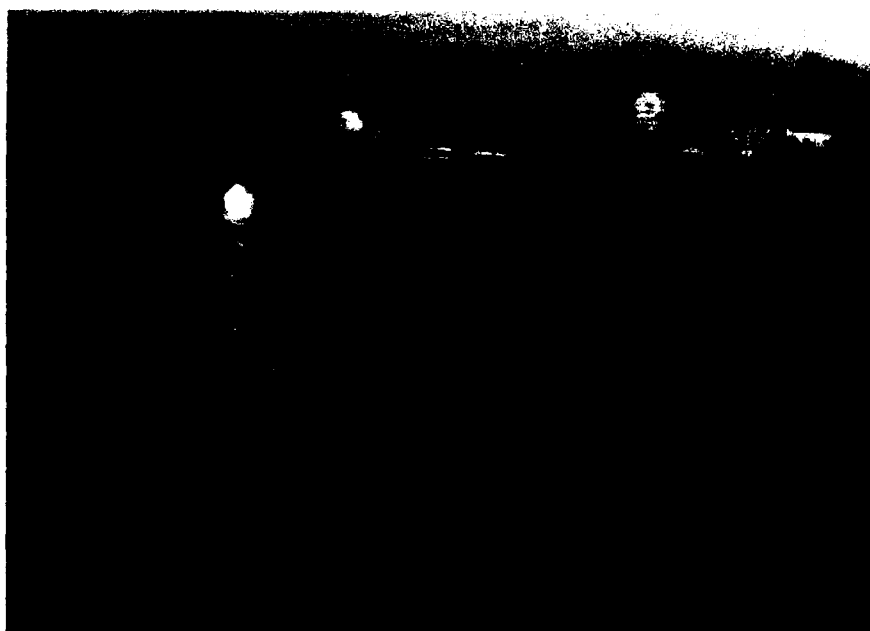
STA 791+00



STA 791+00



STA 792+00



STA 792+00

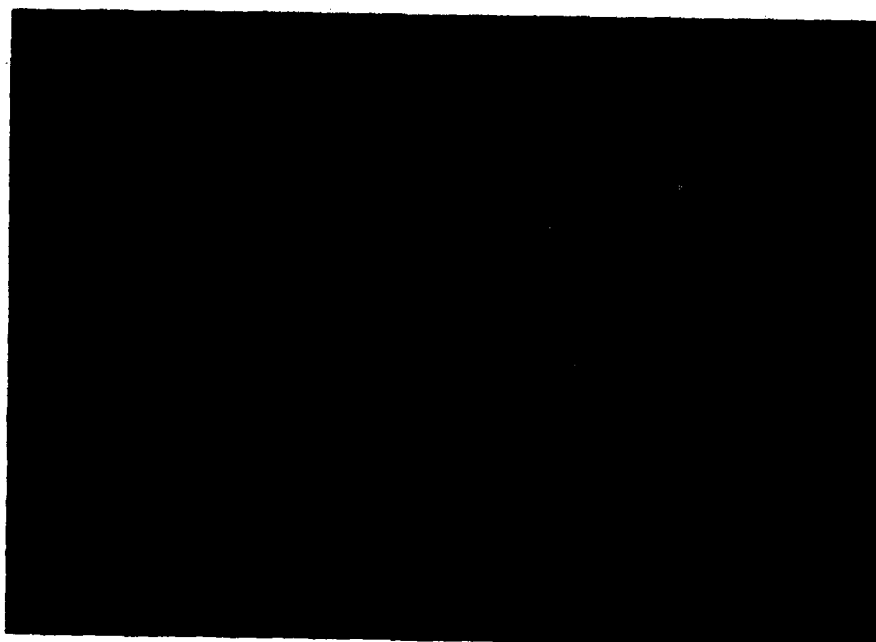


STA 794+00



B

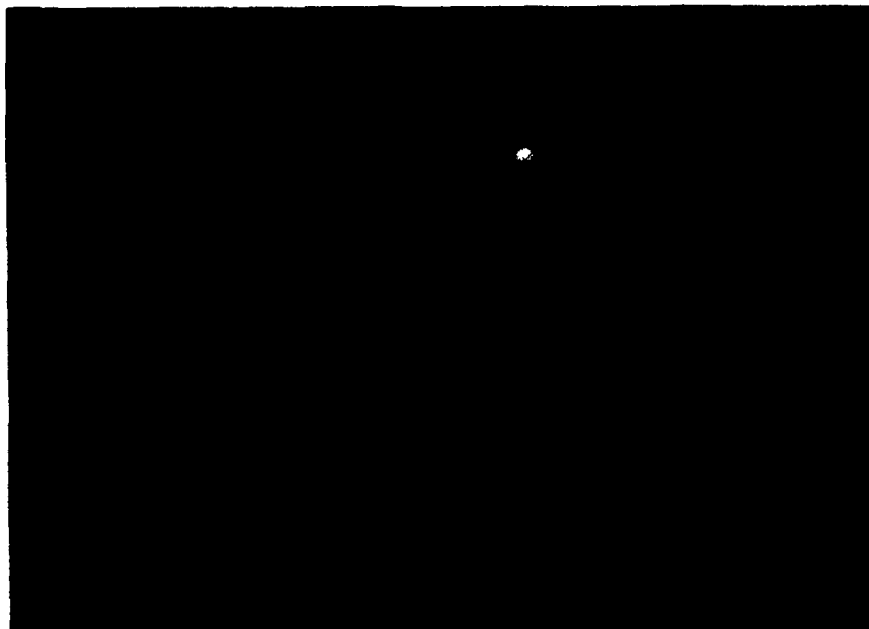
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STA 795+00



STA 795+00



STA 796+00



STA 796+00

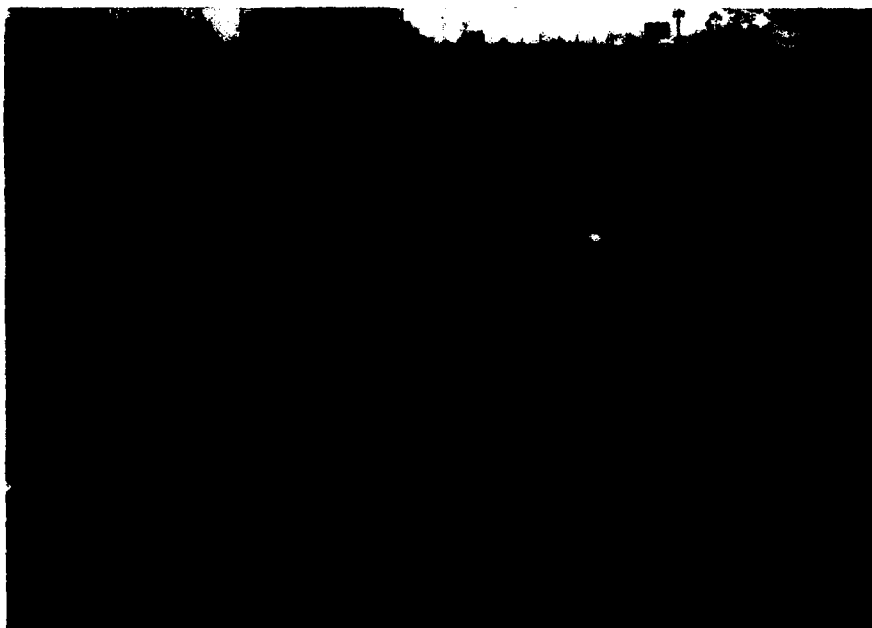


STA 797+00



B

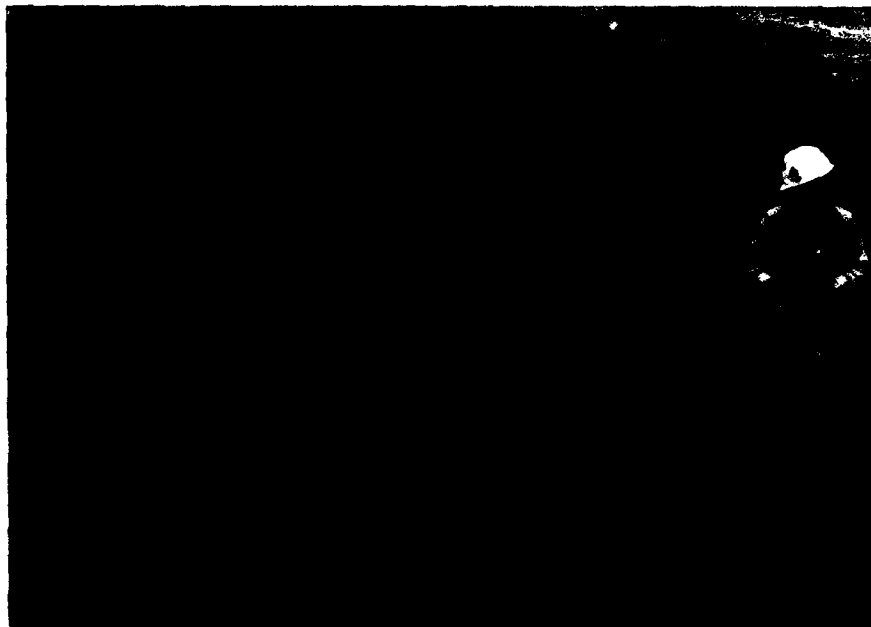
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STA 798+00



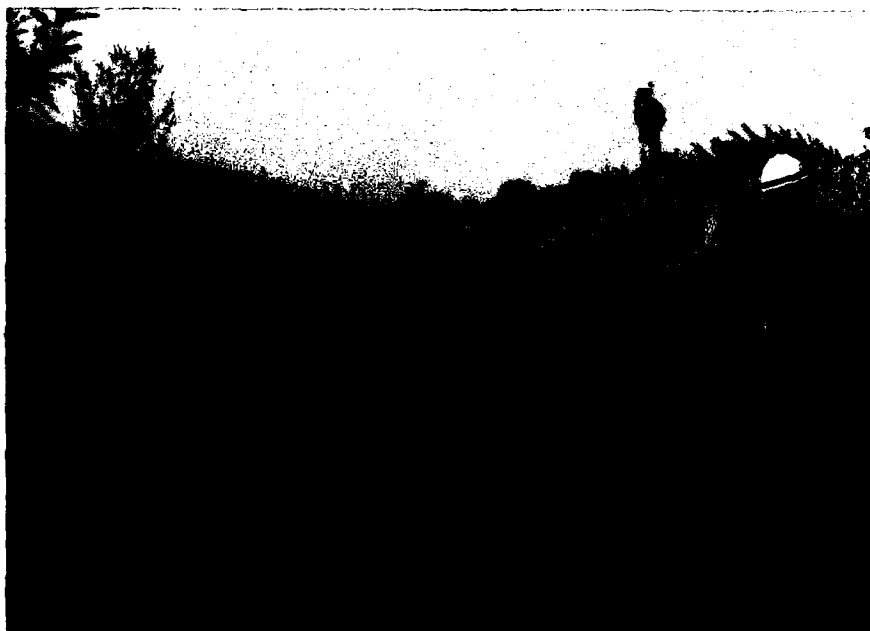
STA 798+00



STA 799+00



STA 810+00



STA 811+00



STA 811+00



STA 811+50



STA 812+00



STA 812+00



STA 813+00



STA 813+00



STA 814+00



STA 814+00



STA 815+00



STA 815+00



STA 816+00



STA 816+00



STA 817+00



STA 817+00 ±



STA 817+00



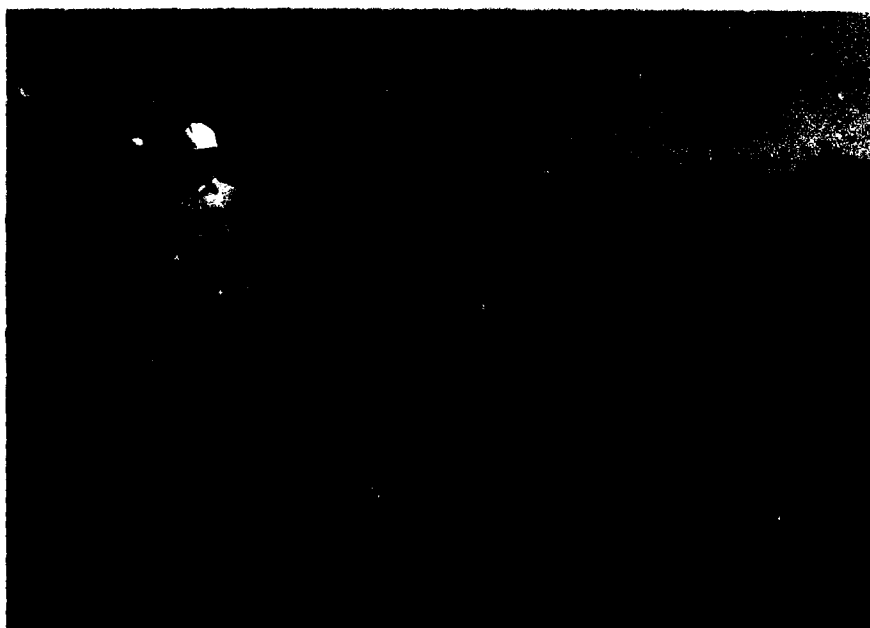
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STA 818+00



STA 819+00



STA 819+00



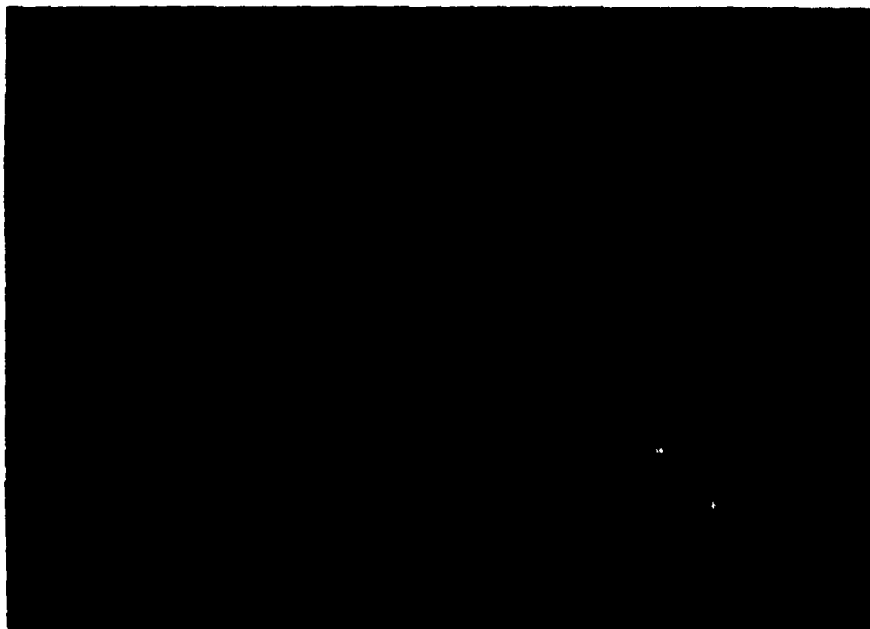
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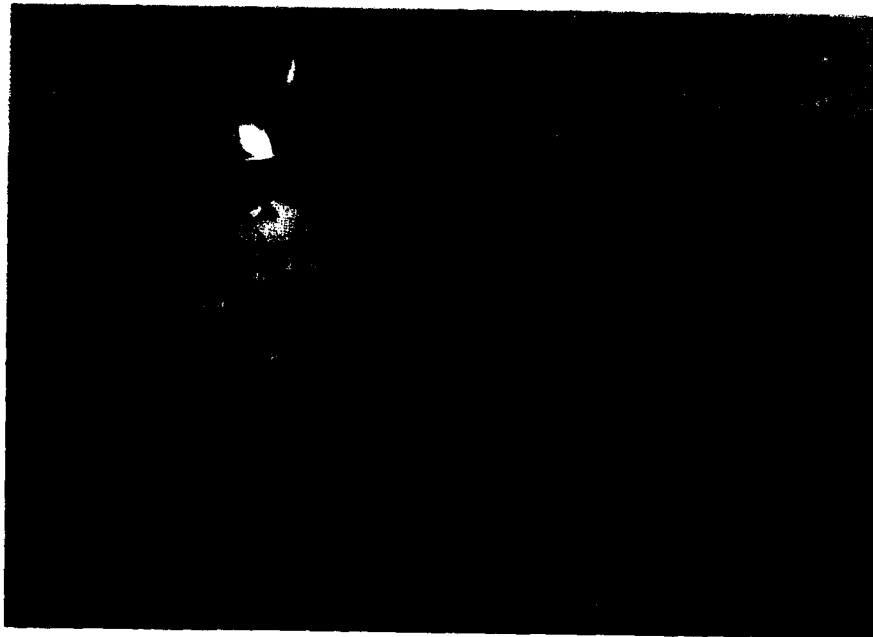
STA 820+00



STA 820+00



STA 820+00



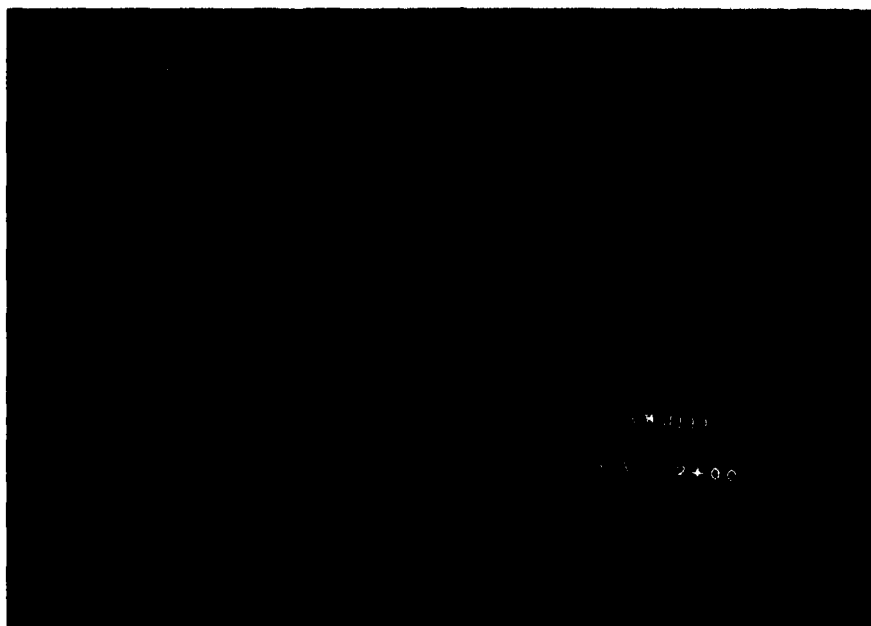
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STA 821+00



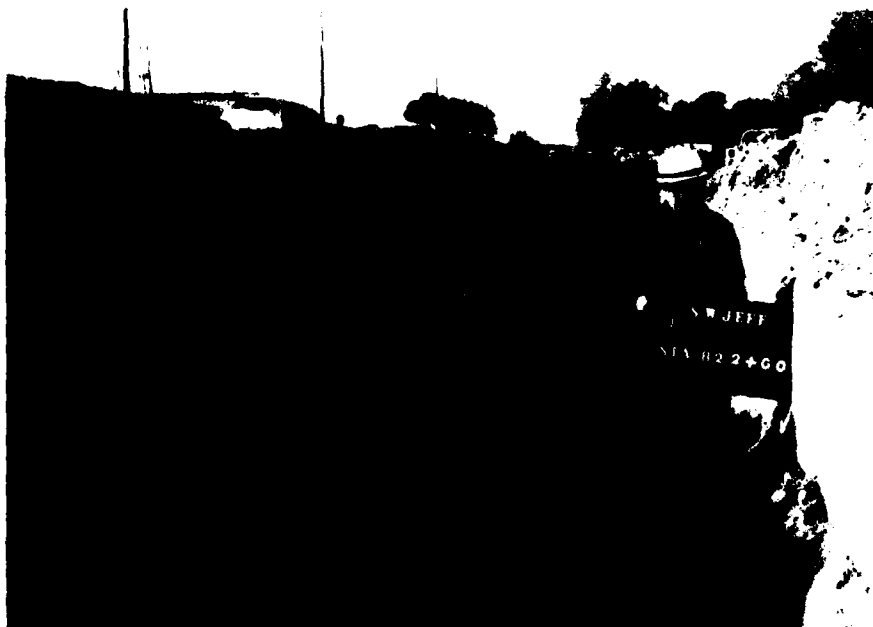
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STA 822+00



STA 822+00



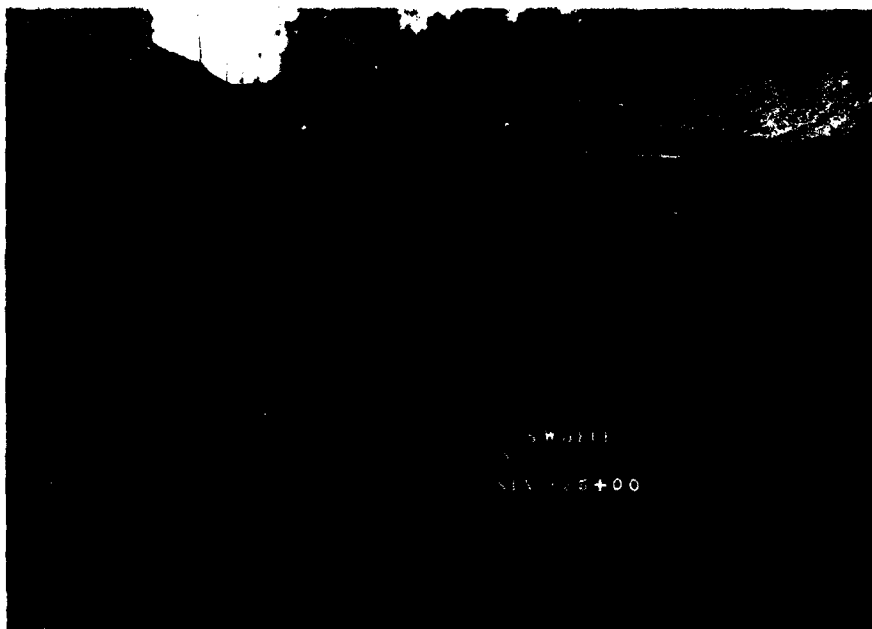
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STA 823+00



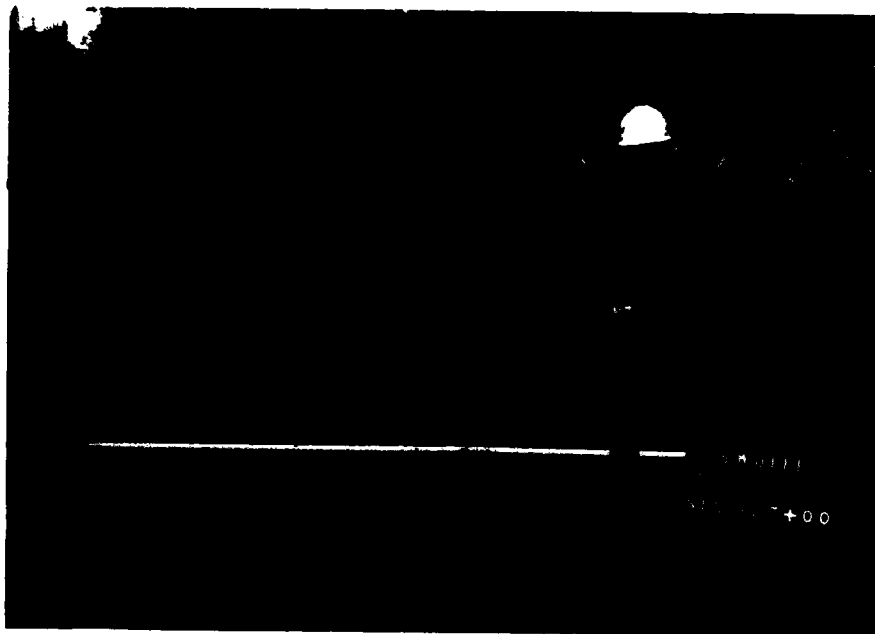
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STA 825+00



STA 826+00



STA 827+00



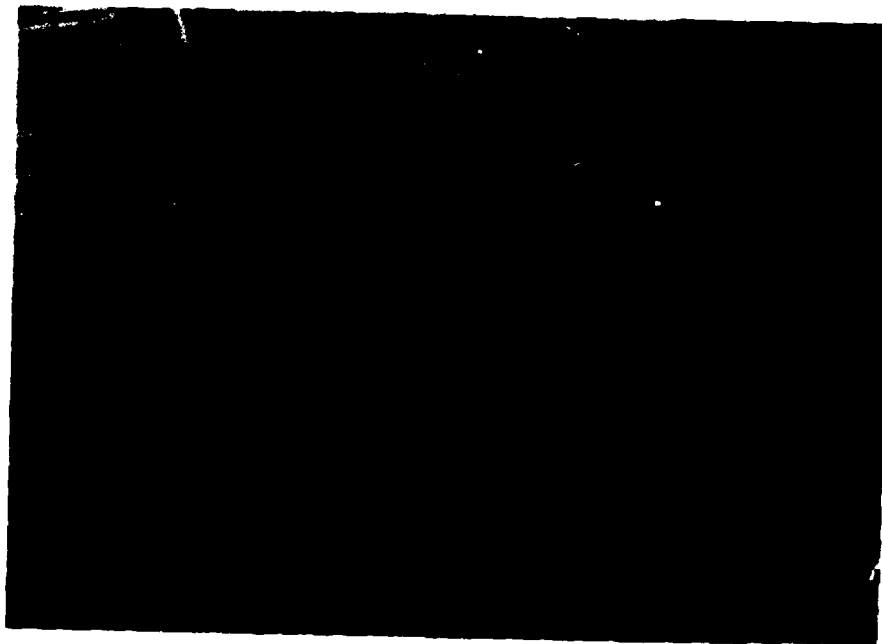
STA 828+00



STA 829+00



BACKFILL AT T-50



UNSUITABLE MATERIAL
TO BE REMOVED (T-50)

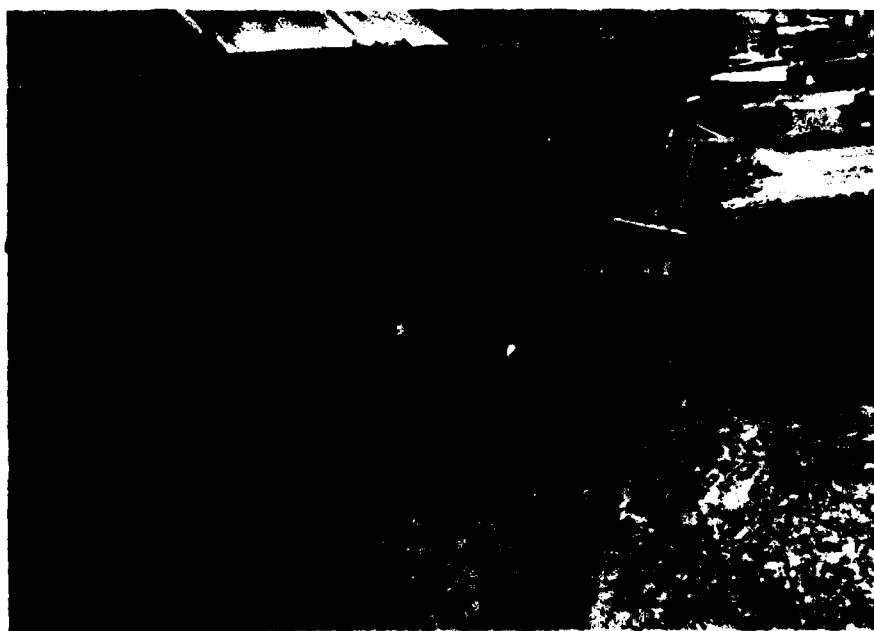


UNSUITABLE MATERIAL
TO BE REMOVED (T-50)

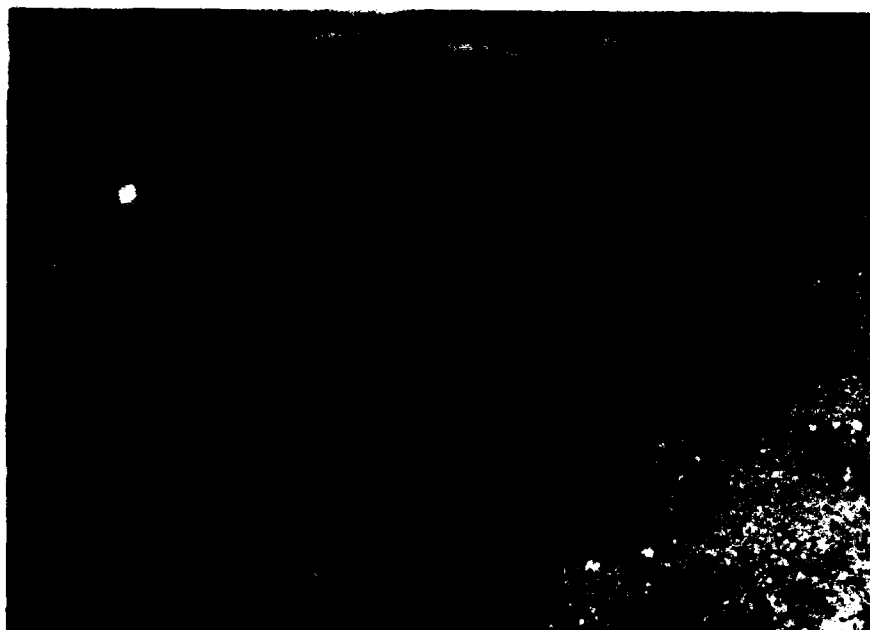
10



EXCAVATION FOR WALL
(T-50)



EXCAVATION FOR WALL
(T-50)



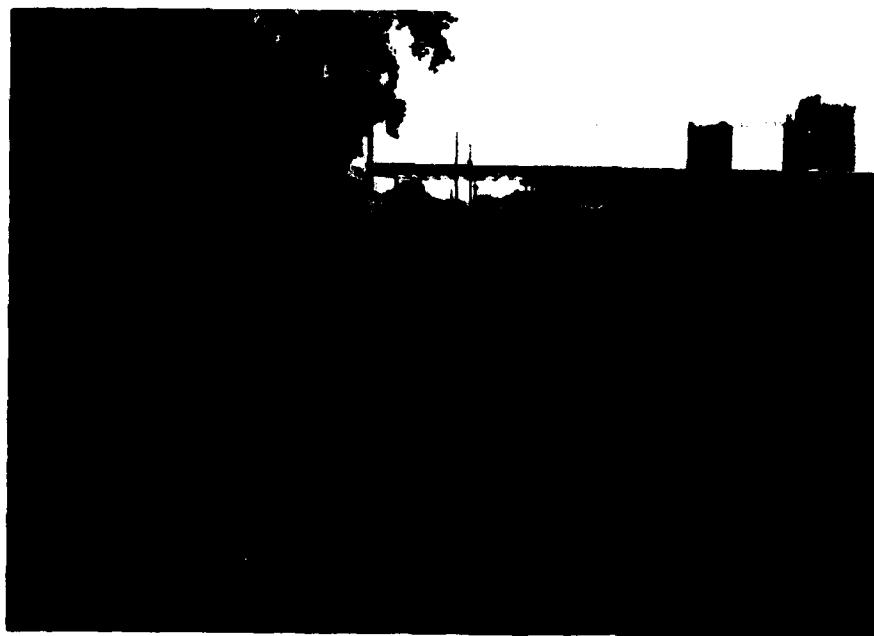
STA 823+00



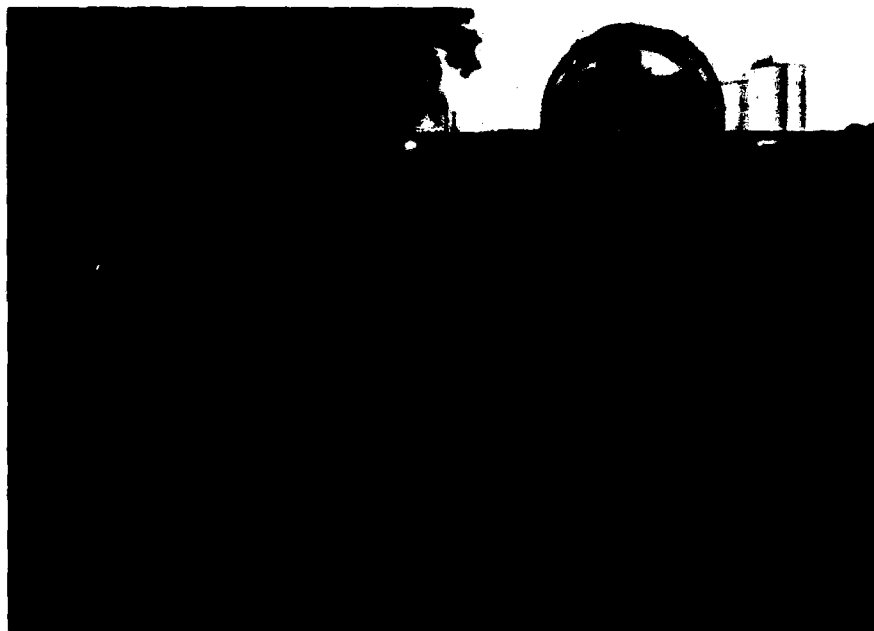
STA 824+00



STA 825+00



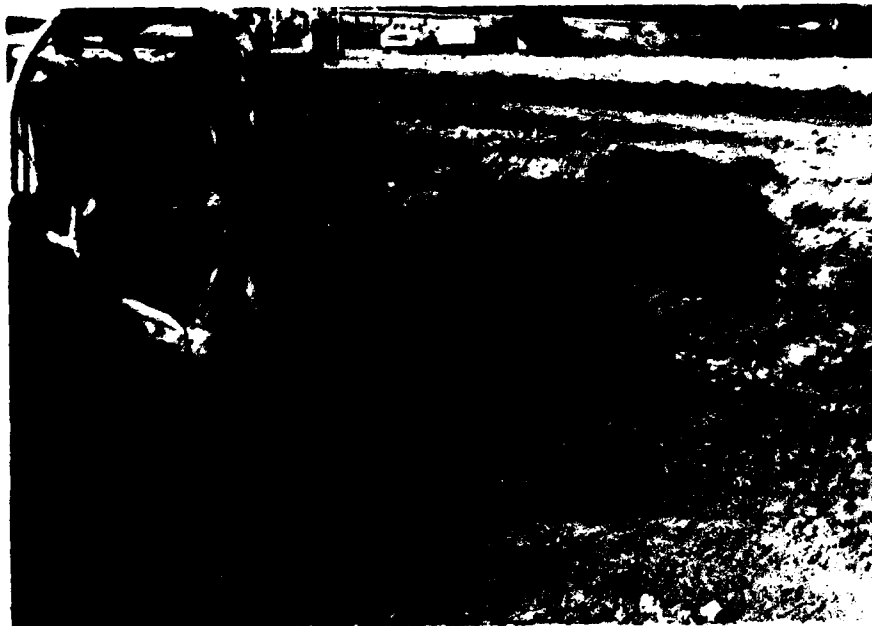
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STA 827+00



STA 828+00



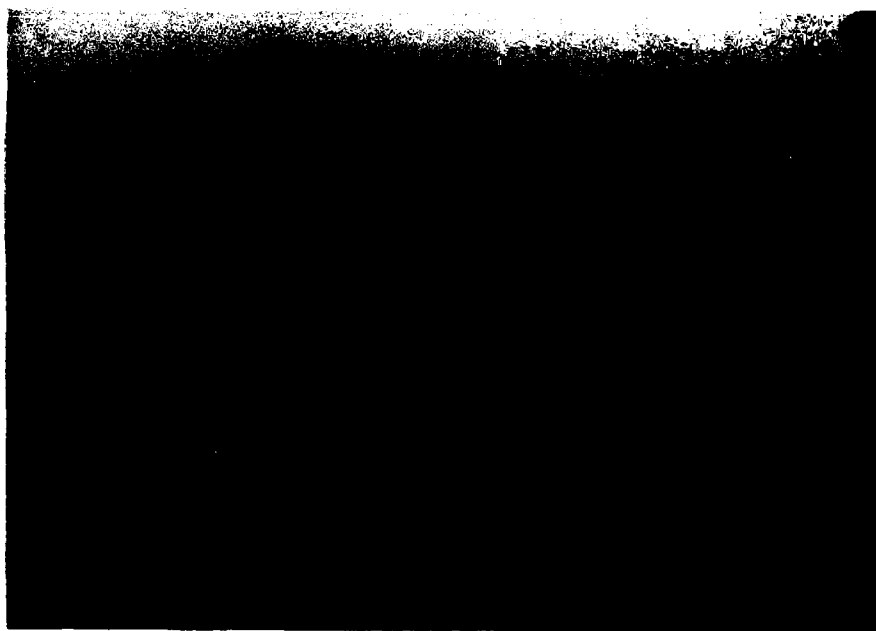
UNSUITABLE MATERIAL
STA 828+50



STA 829+00



STA 830+00



STA 830+00



STA 831+00



STA 831+00



STA 832+00



STA 832+00



STA 832+00



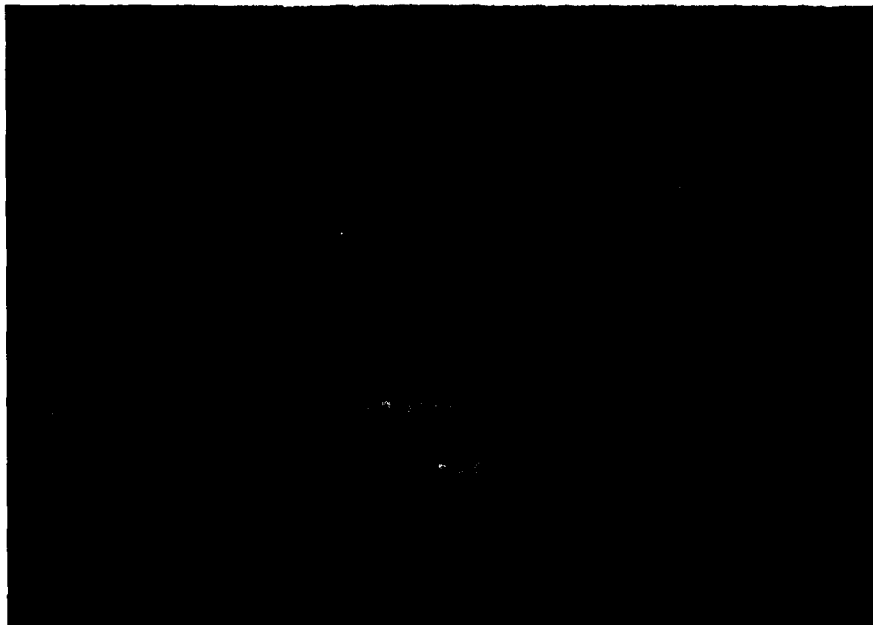
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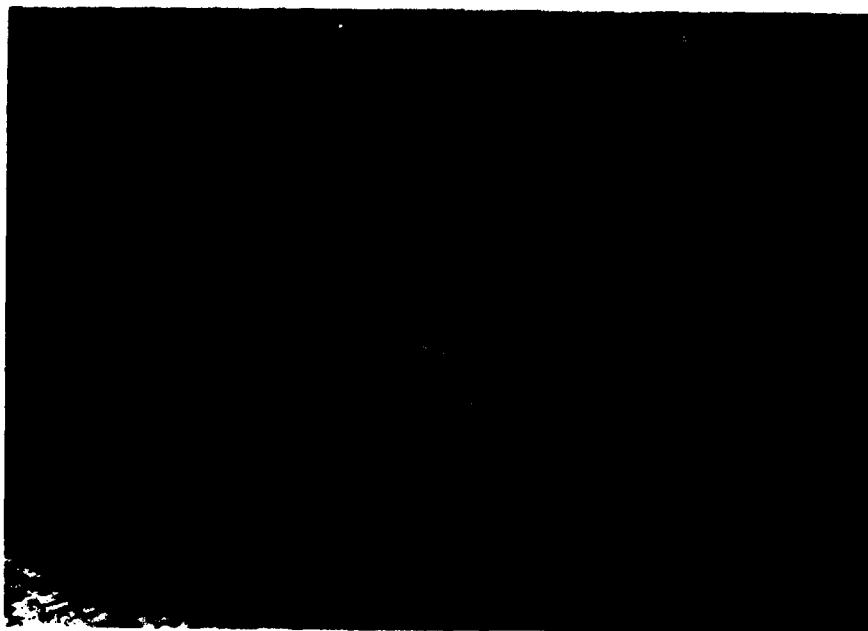
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STA 833+00



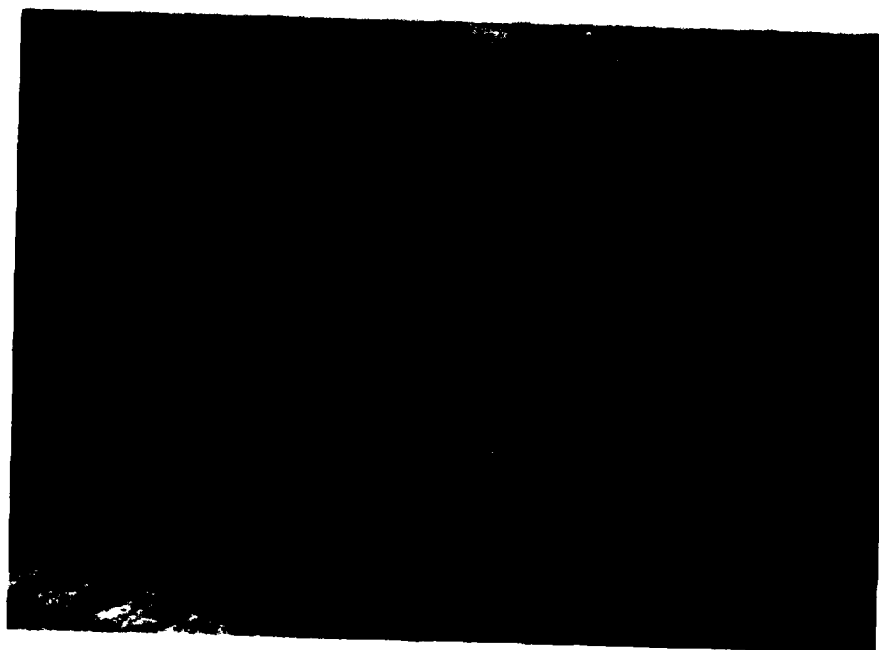
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STA 835+00



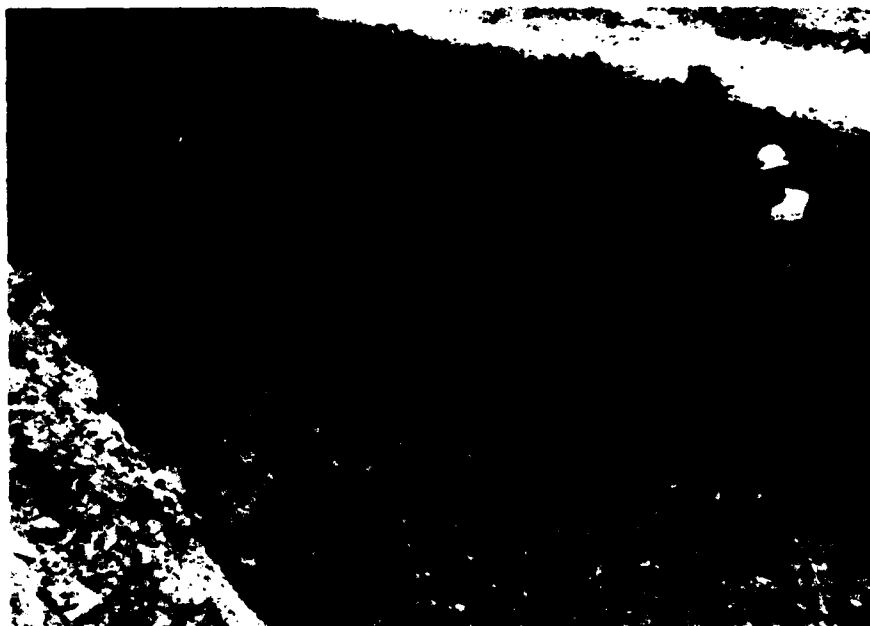
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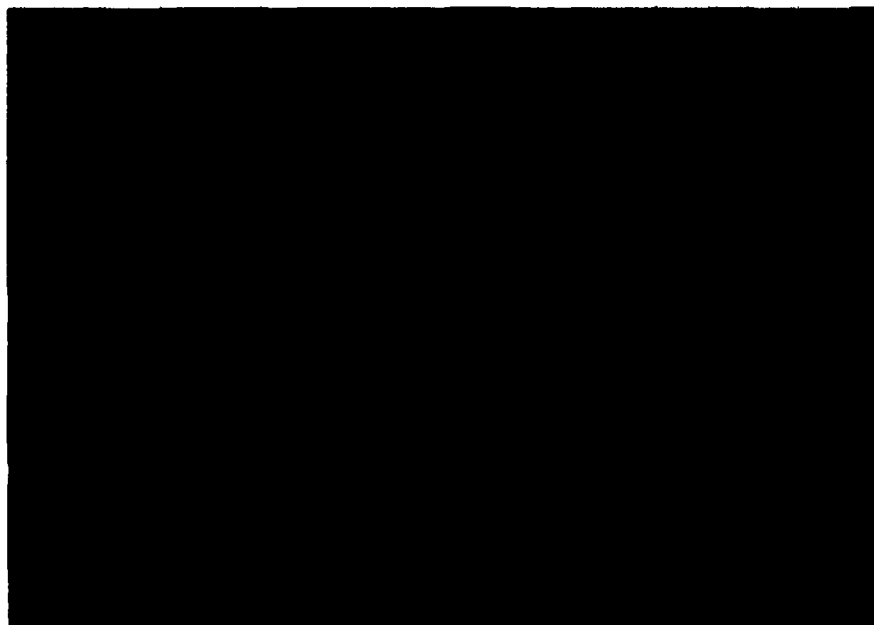
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STA 836+00



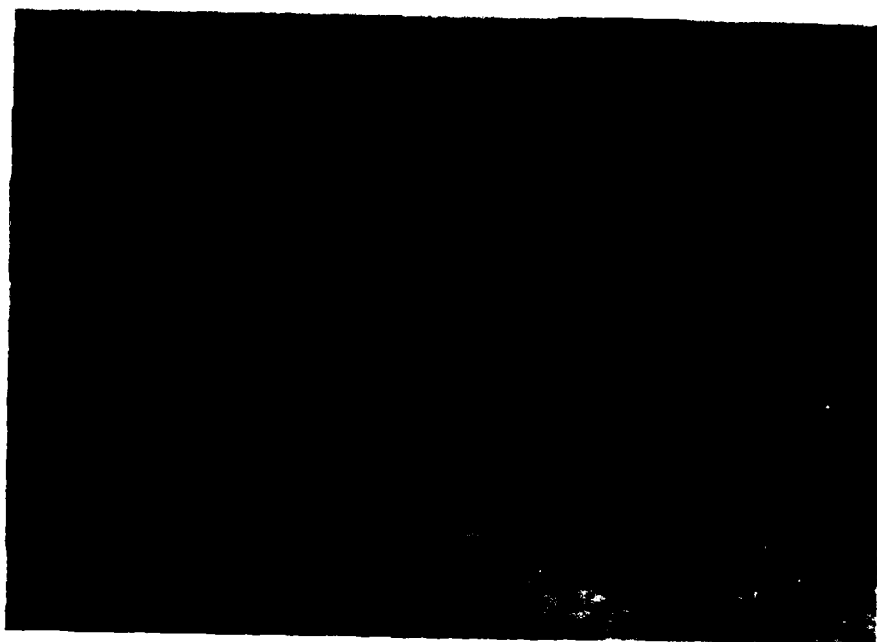
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STA 837+00



STA 838+00



STA 838+00



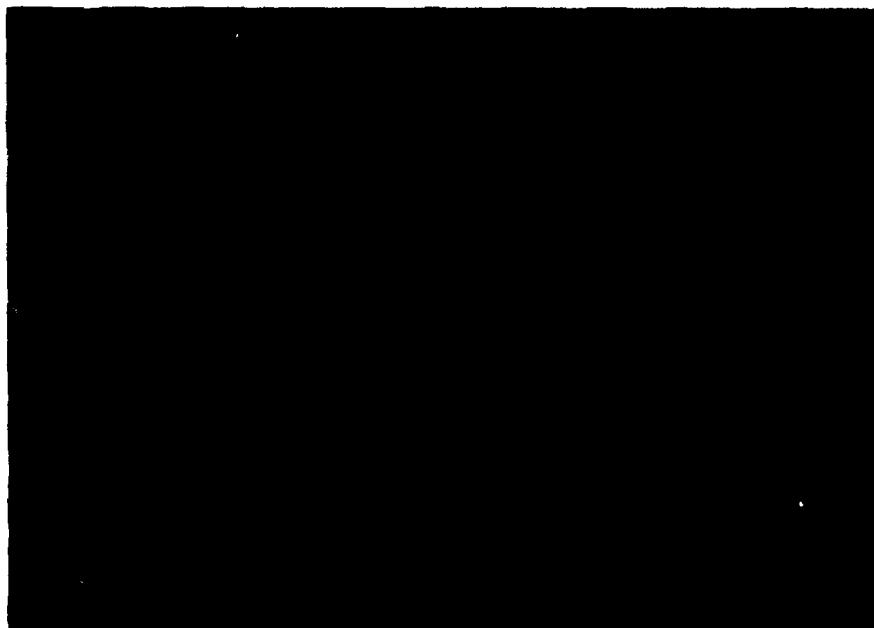
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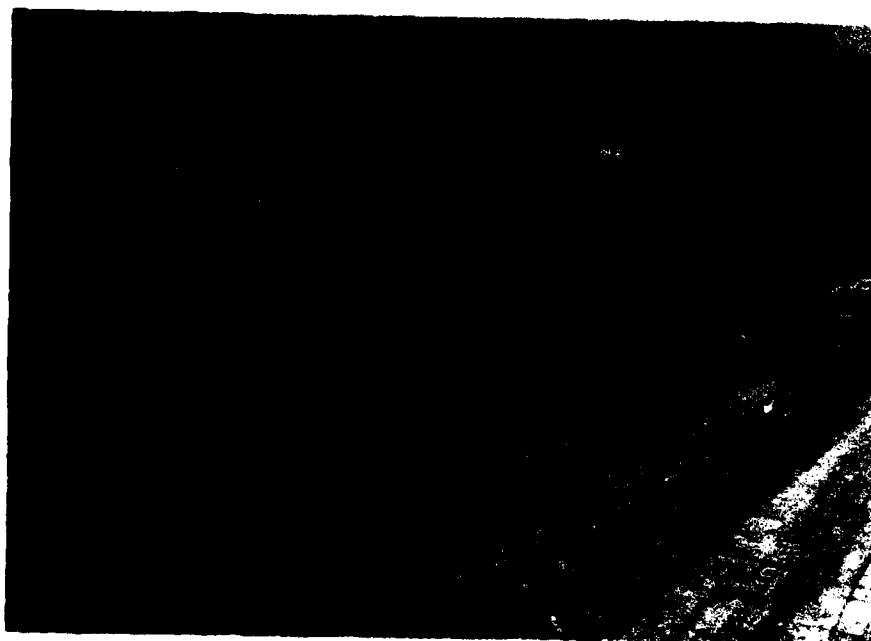
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STA 841+00



STA 842+00



STA 842+00



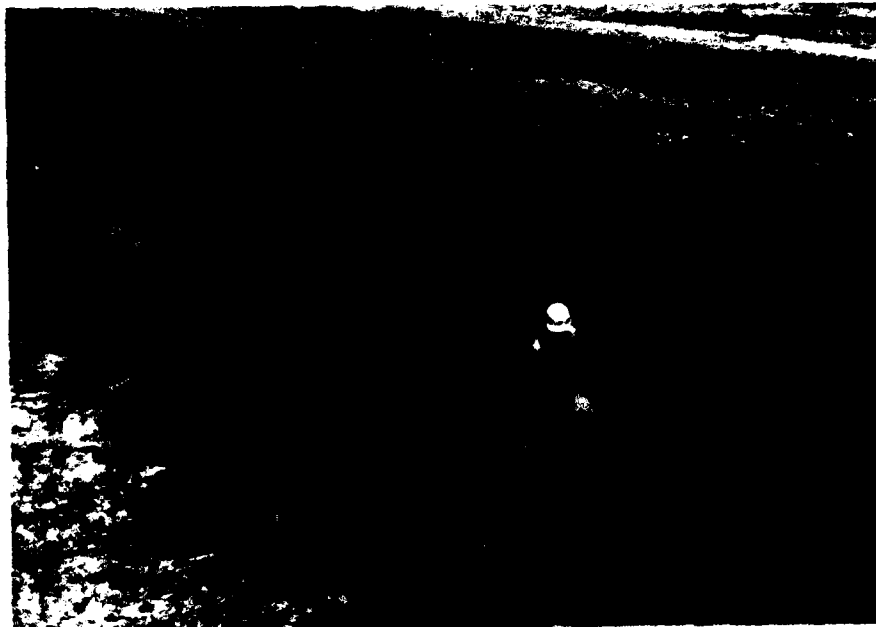
STA 843+00



STA 844+00



DRAIN TILE
STA 841+62 RT



STA 845+00



STA 847+00



STA 848+00



STA 848+00



STA 848+00



STA 849+00



STA 849+00



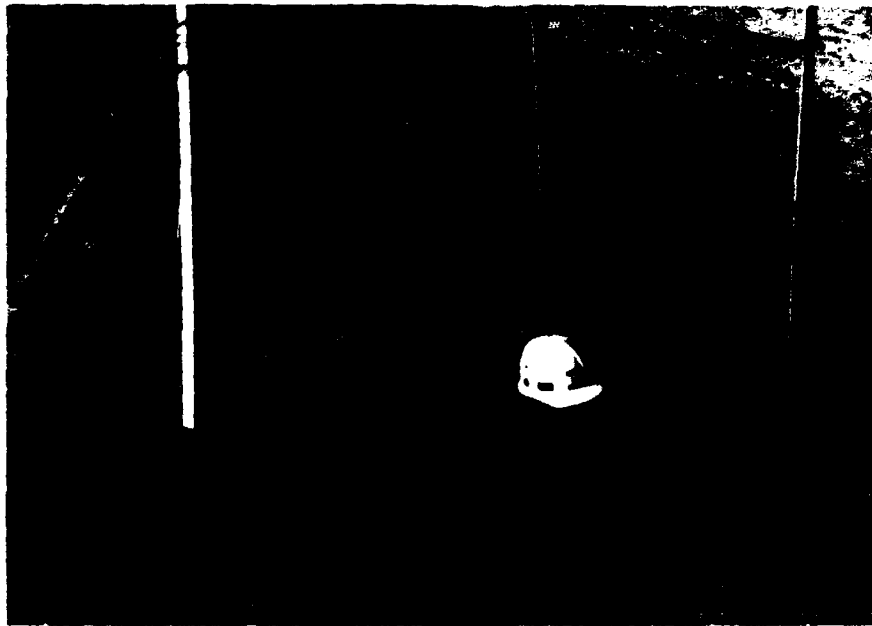
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STA 851+00



STA 852+00



STA 852+84
ROAD "A"



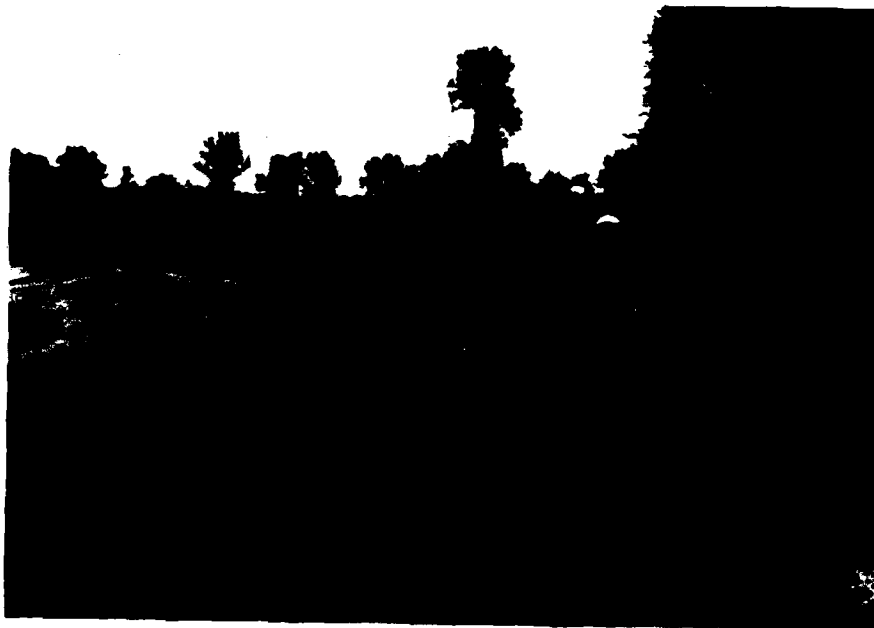
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STA 853+00



STA 854+00



STA 854+00



STA 855+00



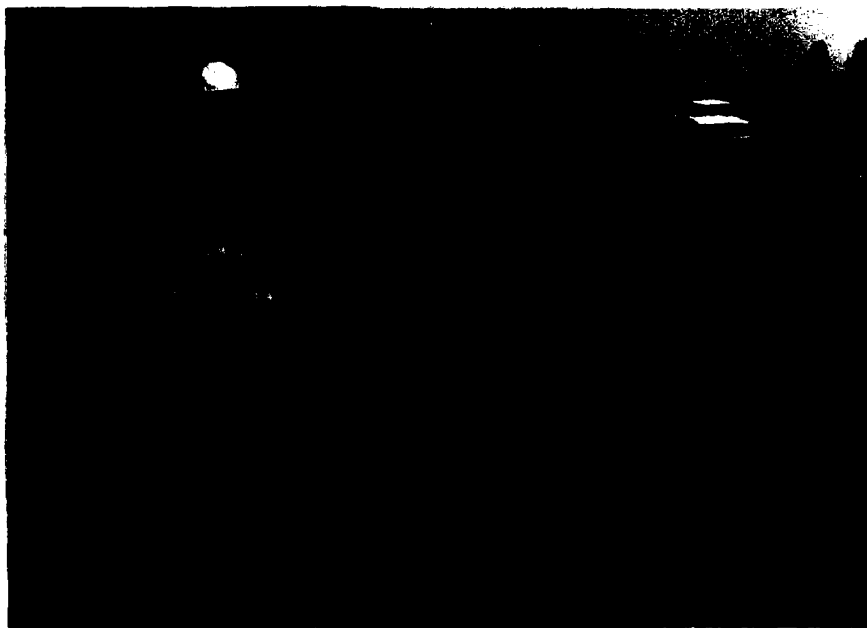
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STA 863+00

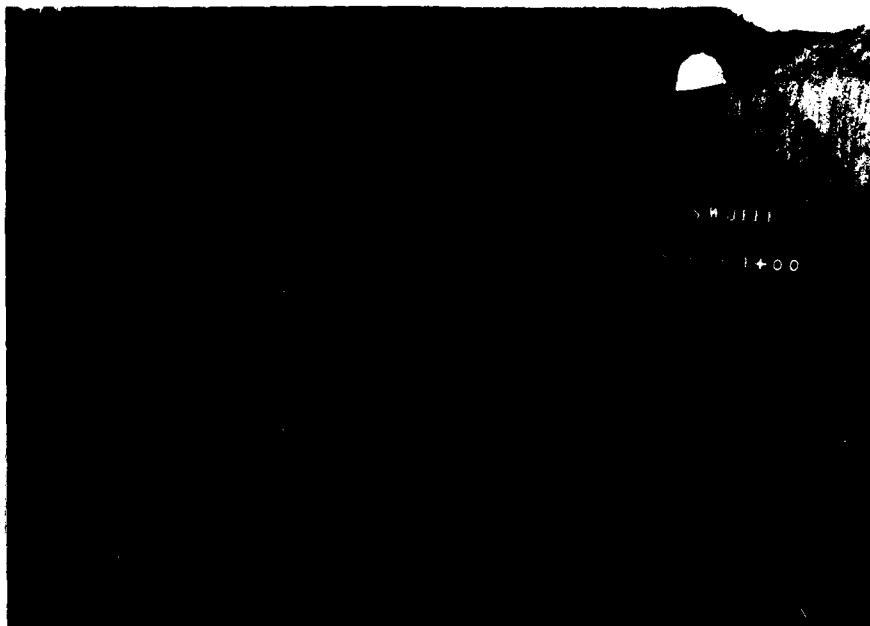


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STA 864+00

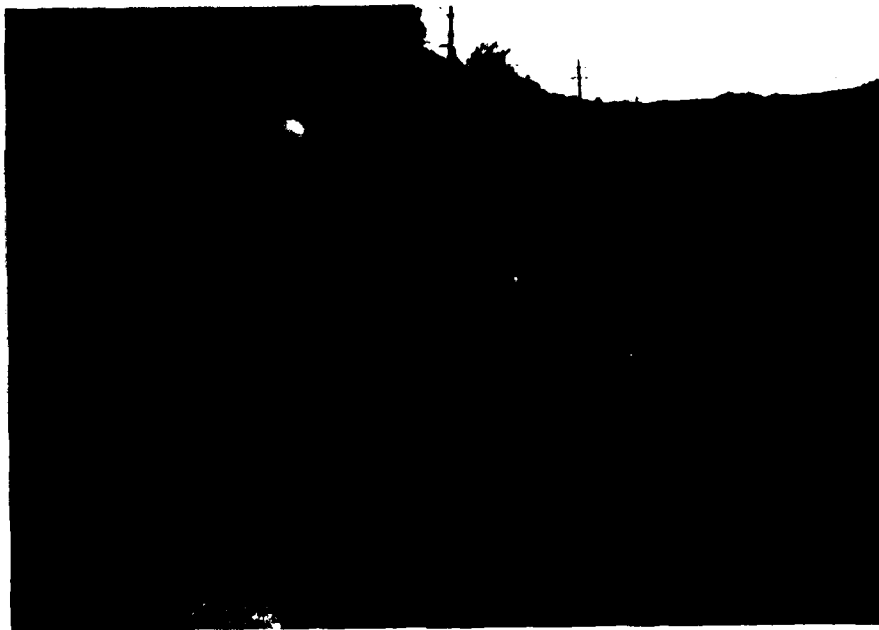
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STA 864+00



STA 865+00



STA 865+00



STA 866+00



STA 867+00

